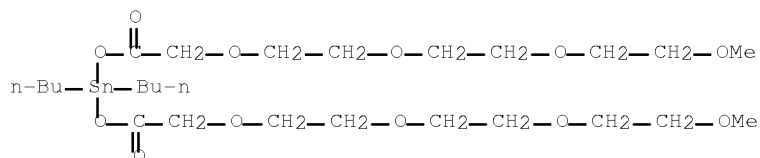


## 10/584,396-323714-EIC SEARCH

REGISTRY RECORDS FOR COMPOUNDS OF CLAIMS 3 & 4

=&gt; d 115 1-2

L15 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2010 ACS on STN  
 RN 854279-36-2 REGISTRY  
 ED Entered STN: 08 Jul 2005  
 CN 2,5,8,11,14,16,19,22,25,28-Decaoxa-15-stannanonacosane,  
 15,15-dibutyl-13,17-dioxo- (9CI) (CA INDEX NAME)  
 MF C26 H52 O12 Sn  
 SR CA  
 LC STN Files: CA, CAPLUS, USPATFULL

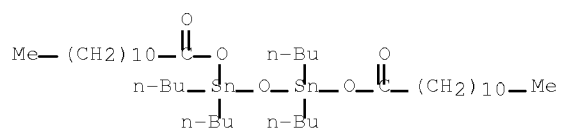


\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)  
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L15 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2010 ACS on STN  
 RN 3669-02-1 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis(lauroyloxy)- (8CI)  
 CN Lauric acid, tetrabutyl-distannoxanylene deriv. (8CI)  
 CN Oxybis[dibutyltin laurate] (6CI)  
 CN Tin, oxybis[dibutyl(lauroyloxy)]- (7CI)  
 OTHER NAMES:  
 CN 1,1,3,3-Tetrabutyl-1,3-bis(lauroyloxy)distannoxane  
 CN Bis(dibutyltin laurate) oxide  
 CN Bis(lauroyloxydibutyltin) oxide  
 CN SB 65  
 CN Stann SB 65  
 CN Stann SCAT 1  
 CN Tegokat 225  
 DR 114797-57-8, 35378-40-6  
 MF C40 H82 O5 Sn2  
 CI COM  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, CHEMCATS, CHEMLIST, CSChem, IFICDB, IFIPAT, IFIUDb, TOXCENTER, USPAT2, USPATFULL, USPATOLD  
 (\*File contains numerically searchable property data)  
 Other Sources: DSL\*\*, EINECS\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)

# 10/584,396-323714-EIC SEARCH



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

76 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

76 REFERENCES IN FILE CAPLUS (1907 TO DATE)

# 10/584,396-323714-EIC SEARCH

## STRUCTURE SEARCH

=> => d his 133

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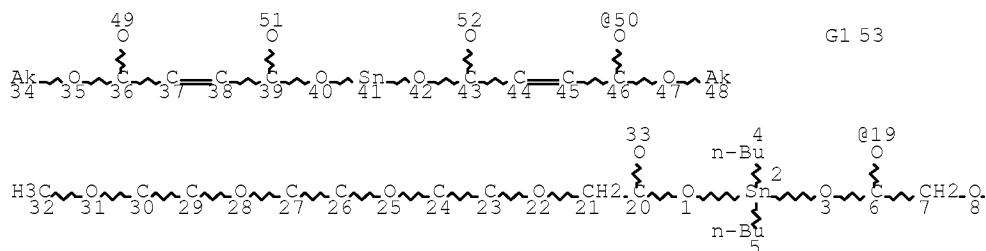
L33 37 S L25 OR L32 OR L29

=> d que 133

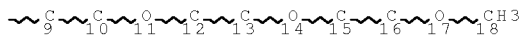
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OR 854279-95-1/BI OR 854279-96-2/BI)

L3 1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND C40  
H82 O5 SN2/MF

L4 STR



Page 1-A



Page 1-B

VAR G1=50/19

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 19

CONNECT IS E1 RC AT 33

CONNECT IS E1 RC AT 34

CONNECT IS E1 RC AT 48

CONNECT IS E1 RC AT 49

CONNECT IS E1 RC AT 50

CONNECT IS E1 RC AT 51

CONNECT IS E1 RC AT 52

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS M2-X8 C AT 34

ECOUNT IS M2-X8 C AT 48

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

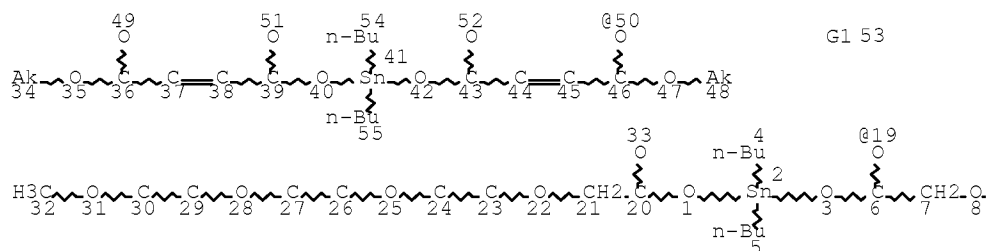
NUMBER OF NODES IS 53

STEREO ATTRIBUTES: NONE

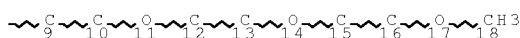
L6 73 SEA FILE=REGISTRY SSS FUL L4

L10 STR

# 10/584,396-323714-EIC SEARCH



Page 1-A



Page 1-B

VAR G1=50/19

NODE ATTRIBUTES:

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CONNECT IS E1 RC AT 19
CONNECT IS E1 RC AT 33
CONNECT IS E1 RC AT 34
CONNECT IS E1 RC AT 48
CONNECT IS E1 RC AT 49
CONNECT IS E1 RC AT 50
CONNECT IS E1 RC AT 51
CONNECT IS E1 RC AT 52
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED
ECOUNT IS M2-X8 C AT 34
ECOUNT IS M2-X8 C AT 48
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GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 55

STEREO ATTRIBUTES: NONE

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L12      26 SEA FILE=REGISTRY SUB=L6 SSS FUL L10
L13      1 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L2 AND L12
L14      27 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L3 OR L12
L15      2 SEA FILE=REGISTRY SPE=ON ABB=ON PLU=ON L3 OR L13
L16      76 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L15
L17      272 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L14
L18      272 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L16 OR L17
L20      QUE SPE=ON ABB=ON PLU=ON PY=<2004 NOT P/DT
L21      QUE SPE=ON ABB=ON PLU=ON (PY=<2004 OR PRY=<2004 OR
AY=<2004 OR MY=<2004 OR REVIEW/DT) AND P/DT
L22      253 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L18 AND ((L20
OR L21))
L23      82 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L22(L) (CAT OR
CATAL?)
L24      QUE SPE=ON ABB=ON PLU=ON ?SILOXAN?
L25      35 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L23 AND L24
L26      QUE SPE=ON ABB=ON PLU=ON POLYMI? OR CURE# OR CURING
# OR CURAB? OR CROSS(W)LINK? OR CROSSLINK?
L27      67 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L22(L)L26
L28      QUE SPE=ON ABB=ON PLU=ON SILICON?(3A) (RUBBER OR ELA
STOMER)
L29      6 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L23 AND L28
L30      53 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L27 AND L23
L32      32 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L25 AND L30
L33      37 SEA FILE=HCAPLUS SPE=ON ABB=ON PLU=ON L25 OR L32 OR
L29
```

INVENTOR SEARCH RESULT

=&gt; d 138 1 ibib ed abs hitstr hitind

L38 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 2005:549748 HCAPLUS Full-text  
 DOCUMENT NUMBER: 143:79522  
 TITLE: One-component polyorganosiloxane  
 compositions containing tin ester  
 catalysts for manufacture of  
 crosslinked silicone  
 rubbers  
 INVENTOR(S): Chaussade, Marc; Guennouni,  
 Nathalie  
 PATENT ASSIGNEE(S): Rhodia Chimie, Fr.  
 SOURCE: Fr. Demande, 28 pp.  
 CODEN: FRXXBL  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
FR 2864096	A1	20050624	FR 2003-15286	2003 1223
			<--	
FR 2864096	B1	20070223		
WO 2005071007	A1	20050804	WO 2004-FR3327	2004 1221
			<--	
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1697454	A1	20060906	EP 2004-816457	2004 1221
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EP 1697454	B1	20090527		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
CN 1906240	A	20070131	CN 2004-80040628	2004 1221
			<--	
JP 2007515537	T	20070614	JP 2006-546243	2004 1221
			<--	
AT 432312	T	20090615	AT 2004-816457	2004 1221
			<--	

# 10/584,396-323714-EIC SEARCH

ES 2328154	T3	20091110	ES 2004-816457	2004 1221
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KR 2007014119	A	20070131	KR 2006-714894	2006 0724
			<--	
US 20070282088	A1	20071206	US 2007-584396	2007 0328
			<--	
PRIORITY APPLN. INFO.:			FR 2003-15286	A 2003 1223
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			WO 2004-FR3327	W 2004 1221
			<--	

## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 143:79522

ED Entered STN: 24 Jun 2005

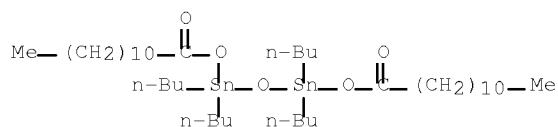
AB Filled polyorganosiloxanes compns. with good compromise between storage stability in the absence of moisture and moisture- crosslinking kinetics contain R1CO2SnR22(OSnR22)xOCOR1 (R2 = C1-8 alkyl; x = 0 or 1; when x = 1 R1 = C1-20 alkyl optionally containing ≥1 O and ≥1 ester or ether group, when x = 0, R1 = C1-20 heteroalkyl containing ≥1 O and optionally containing ≥1 ester or ether group) as crosslinking catalysts.

IT 3669-02-1, Tegokat 225

RL: CAT (Catalyst use); USES (Uses)  
(Tegokat 225; one-component polyorganosiloxane compns. containing tin ester catalysts for manufacture of crosslinked silicone rubbers)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)

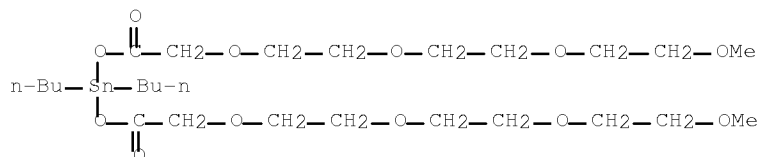


IT 854279-96-2

RL: CAT (Catalyst use); USES (Uses)  
(one-component polyorganosiloxane compns. containing tin ester catalysts for manufacture of crosslinked silicone rubbers)

RN 854279-96-2 HCAPLUS

CN 2,5,8,11,14,16,19,22,25,28-Decaoxa-15-stannanonacosane, 15,15-dibutyl-13,17-dioxo- (9CI) (CA INDEX NAME)



# 10/584,396-323714-EIC SEARCH

IC ICM C08K005-098  
ICS C08J003-24; C08L083-06; C09K003-10  
CC 39-10 (Synthetic Elastomers and Natural Rubber)  
ST storage stable one component moisture curable  
silicone rubber; tin ester crosslinking  
catalyst moisture curable silicone  
rubber

IT Vulcanization accelerators and agents  
(one-component polyorganosiloxane compns. containing tin  
ester catalysts for manufacture of crosslinked  
silicone rubbers)

IT Silicone rubber, preparation  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(one-component polyorganosiloxane compns. containing tin  
ester catalysts for manufacture of crosslinked  
silicone rubbers)

IT 3669-02-1, Tegokat 225  
RL: CAT (Catalyst use); USES (Uses)  
(Tegokat 225; one-component polyorganosiloxane  
compns. containing tin ester catalysts for manufacture of  
crosslinked silicone rubbers)

IT 854279-96-2  
RL: CAT (Catalyst use); USES (Uses)  
(one-component polyorganosiloxane compns. containing tin  
ester catalysts for manufacture of crosslinked  
silicone rubbers)

IT 854279-95-1P  
RL: IMF (Industrial manufacture); PREP (Preparation)  
(rubber; one-component polyorganosiloxane compns.  
containing tin ester catalysts for manufacture of  
crosslinked silicone rubbers)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE  
THIS RECORD (1 CITINGS)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

STRUCTURE SEARCH RESULTS

=&gt; d his 139

(FILE 'HCAPLUS' ENTERED AT 15:59:01 ON 04 MAR 2010)  
 L39 36 S L33 NOT L38

FILE 'REGISTRY' ENTERED AT 16:13:05 ON 04 MAR 2010

FILE 'HCAPLUS' ENTERED AT 16:14:37 ON 04 MAR 2010

=&gt; d 139 1-36 ibib ed abs hitstr hitind

L39 ANSWER 1 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2004:9133 HCAPLUS Full-text

DOCUMENT NUMBER: 141:244945

TITLE: The effects of organotin catalysts  
 on hydrolytic condensation of  
 polymethylsiloxane oligomer and  
 moisture cure of the coatings

AUTHOR(S): Iwasawa, Akira; Aoki, Ryuichi; Sasaki,  
 Hiroharu; Takahashi, Toshiya; Omoto, Hiroaki

CORPORATE SOURCE: Technical Department, Fundamental Research  
 Laboratories 2nd Division, Dai Nippon Toray  
 Co., Ltd., Ohtawara-city, Tochigi-pref.,  
 324-0036, Japan

SOURCE: Shikizai Kyokaishi (2003), 76(10),  
 373-379

CODEN: SKYOAQ; ISSN: 0010-180X

PUBLISHER: Shikizai Kyokai

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 07 Jan 2004

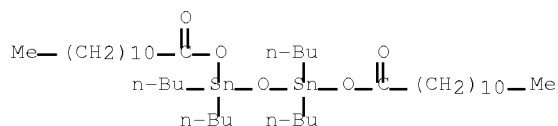
AB The poly(methylsiloxane) oligomer (P-MTS) was synthesized by hydrolytic condensation of trimethoxy(methyl)silane. The effect of mono- and bis-organotin carboxylate catalysts on hydrolytic condensation was studied in terms of pot life time and tack free time of P-MTS coatings. The viscosity and tack free time of P-MTS were measured with IR and NMR spectral methods. The condensation reaction proceeds faster with bis-organotin catalysts than with mono-organotin, depending on the concentration of active species generated from hydrolysis of the organotin catalysts. The tack free time was correlated with the functional group of organotin carboxylates. Due to steric hindrance of the functional group, dibutyltin dilaurate is less easily hydrolyzed to inactive dibutyltin oxide compared to dibutyltin diacetate. This results in the lauroyloxy group being more effective in catalysis than the acetoxy group.

IT 3669-02-1, Bis(lauroyloxydibutyltin) oxide

RL: CAT (Catalyst use); USES (Uses)  
 (mechanism of organotin catalysts in hydrolytic  
 condensation and moisture cure of poly(  
 methylsiloxane) coatings)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
 INDEX NAME)



CC 42-3 (Coatings, Inks, and Related Products)

ST polymethylsiloxane prepn hydrolytic polymn organotin  
 catalyst substituent effect



## 10/584,396-323714-EIC SEARCH

IT Polymerization catalysts  
(hydrolytic condensation; mechanism of organotin  
catalysts in hydrolytic condensation and moisture  
cure of poly(methylsiloxane) coatings)

IT Steric hindrance  
Substituent effects  
Viscosity  
(mechanism of organotin catalysts in hydrolytic  
condensation and moisture cure of poly(  
methylsiloxane) coatings)

IT 77-58-7, Dibutyltin dilaurate 1067-33-0, Dibutyltin diacetate  
3669-02-1, Bis(lauroyloxydibutyltin) oxide 5967-09-9,  
Bis(acetoxydibutyltin) oxide  
RL: CAT (Catalyst use); USES (Uses)  
(mechanism of organotin catalysts in hydrolytic  
condensation and moisture cure of poly(  
methylsiloxane) coatings)

IT 9004-73-3, Poly(methylsiloxane) 25498-03-7,  
Trimethoxy(methyl)silane homopolymer  
RL: CPS (Chemical process); PEP (Physical, engineering or chemical  
process); TEM (Technical or engineered material use); PROC  
(Process); USES (Uses)  
(mechanism of organotin catalysts in hydrolytic  
condensation and moisture cure of poly(  
methylsiloxane) coatings)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE  
FOR THIS RECORD. ALL CITATIONS AVAILABLE  
IN THE RE FORMAT

L39 ANSWER 2 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2001:703485 HCAPLUS Full-text  
DOCUMENT NUMBER: 135:243111  
TITLE: Weather-resistant room-temperature-  
curable acrylic compositions  
INVENTOR(S): Yamauchi, Yasushi  
PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2001261915	A	20010926	JP 2000-70719	2000 0314

PRIORITY APPLN. INFO.: <--  
JP 2000-70719  
2000  
0314  
<--

ED Entered STN: 26 Sep 2001

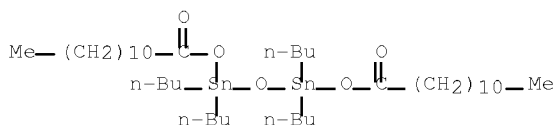
AB The compns. comprise (meth)acrylate polymers having hydrolytically crosslinkable silyl  
group terminals, hindered amine light stabilizers with mol. weight ≥2000, and  
crosslinking catalysts. Thus, a composition comprising a hydrolyzable silyl group-  
containing (meth)acrylate polymer (MA 903), a light stabilizer (Chimassorb 2020 FDL;  
mol. weight 2600-3400), bis(dibutyltin laurate) oxide, and a UV-absorber (Tinuvin 327)  
showed no crack for 5500 h in a sunshine weather meter test.

IT 3669-02-1, Bis(dibutyltin laurate) oxide  
RL: CAT (Catalyst use); USES (Uses)  
(crosslinking catalyst; weather-resistant  
room-temperature-curable acrylic compns.)

RN 3669-02-1 HCAPLUS

## 10/584,396-323714-EIC SEARCH

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
INDEX NAME)



IC ICM C08L033-04  
ICS C08F008-42; C08F220-10; C08K005-00; C08K005-3435  
CC 37-6 (Plastics Manufacture and Processing)  
ST acrylic hydrolysis silane room temp crosslink; weather  
resistance hindered amine acrylic resin  
IT Polysiloxanes, preparation  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
PRP (Properties); PREP (Preparation); USES (Uses)  
(acrylic; weather-resistant room-temperature-curable  
acrylic compns.)  
IT Amines, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(hindered, light stabilizer; weather-resistant room-temperature-  
curable acrylic compns.)  
IT Acrylic polymers, preparation  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
PRP (Properties); PREP (Preparation); USES (Uses)  
(polysiloxane-; weather-resistant room-temperature-  
curable acrylic compns.)  
IT Crosslinking catalysts  
UV stabilizers  
(weather-resistant room-temperature-curable acrylic  
compns.)  
IT 3864-99-1, Tinuvin 327  
RL: MOA (Modifier or additive use); USES (Uses)  
(UV-stabilizer; weather-resistant room-temperature-curable  
acrylic compns.)  
IT 3669-02-1, Bis(dibutyltin laurate) oxide  
RL: CAT (Catalyst use); USES (Uses)  
(crosslinking catalyst; weather-resistant  
room-temperature-curable acrylic compns.)  
IT 360785-62-2, Chimassorb 2020FDL  
RL: MOA (Modifier or additive use); USES (Uses)  
(light stabilizer; weather-resistant room-temperature-curable  
acrylic compns.)  
IT 351415-96-8, MA 903  
RL: POF (Polymer in formulation); PRP (Properties); USES (Uses)  
(weather-resistant room-temperature-curable acrylic  
compns.)

L39 ANSWER 3 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 2001:68177 HCAPLUS Full-text  
DOCUMENT NUMBER: 134:132997  
TITLE: Acrylic silicone-type topcoat compositions and  
products coated therewith  
INVENTOR(S): Matsuo, Yoichi; Tamai, Hitoshi; Nanbu,  
Toshiro; Arioka, Jiro; Ando, Naotami  
PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 19 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1

## 10/584,396-323714-EIC SEARCH

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001026740	A	20010130	JP 2000-93741	2000 0330

PRIORITY APPLN. INFO.: <-- JP 1999-132540 A 1999  
0513

ED Entered STN: 30 Jan 2001

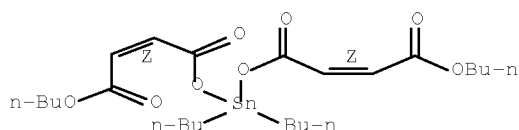
AB The compns. comprise (A) vinyl copolymers containing alkoxysilyl groups and branched and/or cyclic structures and (B) weak solvents. Thus, a composition, with good solubility in weak solvents, containing  $\gamma$ -methacryloxypropyltrimethoxysilane (I)-Me methacrylate (II)-i-Bu methacrylate (III)-lauryl methacrylate (IV) copolymer, I-II-III-IV-styrene-unsatd. polyester (Hariphthal 332-45) copolymer, naphtha, Et silicate, Me orthoacetate, dodecylmercaptan, a silane coupler, a catalyst, and a pigment was applied on an Al plate to give a coating showing good gloss, adhesion to the substrate, and soiling and weather resistance.

IT 15546-16-4, Dibutyltin bis(butyl maleate)  
RL: CAT (Catalyst use); USES (Uses)  
(catalyst; acrylic silicone-type topcoat compns. with  
good soiling and weather resistance)

RN 15546-16-4 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-dibutyl  
ester (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C09D143-04

ICS C09D133-04

CC 42-10 (Coatings, Inks, and Related Products)

ST acrylic siloxane topcoat soiling resistance; naphtha

soly acrylic siloxane coating; weather resistance

acrylic siloxane coating

IT Crosslinking catalysts

(acrylic silicone-type topcoat compns. with good soiling and  
weather resistance)

IT Polysiloxanes, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation);

PRP (Properties); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)

(acrylic-polyester-; acrylic silicone-type topcoat compns. with  
good soiling and weather resistance)

IT Polyesters, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation);

PRP (Properties); TEM (Technical or engineered material use); PREP

(Preparation); USES (Uses)

(acrylic-polysiloxane-; acrylic silicone-type topcoat  
compns. with good soiling and weather resistance)

IT Crosslinking catalysts

(neg., mercapto compds.; acrylic silicone-type topcoat compns.  
with good soiling and weather resistance)

IT Polysiloxanes, uses

## 10/584,396-323714-EIC SEARCH

RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PRP (Properties); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (polyester-, acrylic-silicate-, acrylic silicone-type topcoat  
 compns. with good soiling and weather resistance)

IT Polyesters, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PRP (Properties); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (polysiloxane-, acrylic-silicate-, acrylic  
 silicone-type topcoat compns. with good soiling and weather  
 resistance)

IT 1343-98-2DP, Silicic acid, alkyl esters, polymers with acrylic  
 polyester-siloxanes 321999-31-9P 321999-32-0P  
 322391-82-2P, N,N-Dimethylacrylamide-Ethyl silicate 48;Hariphthal  
 332-45;isobutyl methacrylate-lauryl  
 methacrylate-γ-methacryloxypropyltrimethoxysilane-methyl  
 methacrylate-styrene copolymer 322391-83-3P,  
 N,N-Dimethylacrylamide-Ethyl silicate 48-Hariphthal  
 332-45-isobutyl methacrylate-lauryl  
 methacrylate-γ-methacryloxypropyltrimethoxysilane-methyl  
 methacrylate-stearyl methacrylate-styrene-tert-butyl methacrylate  
 copolymer 322391-84-4P, Cyclohexyl  
 methacrylate-N,N-dimethylacrylamide-Ethyl silicate 48-Hariphthal  
 332-45-2-hydroxyethyl methacrylate-isobutyl methacrylate-lauryl  
 methacrylate-γ-methacryloxypropyltrimethoxysilane-methyl  
 methacrylate-styrene copolymer 322391-85-5P, Acrylamide-Ethyl  
 silicate 48-Hariphthal 332-45-isobutyl methacrylate-lauryl  
 methacrylate-γ-methacryloxypropyltrimethoxysilane-methyl  
 methacrylate-styrene copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PRP (Properties); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (acrylic silicone-type topcoat compns. with good soiling and  
 weather resistance)

IT 10039-33-5, Dioctyltin bis(2-ethylhexyl maleate)  
~~15546-16-4~~, Dibutyltin bis(butyl maleate) 29881-72-9,  
 Dibutyltin bis(oleyl maleate)  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalyst; acrylic silicone-type topcoat compns. with  
 good soiling and weather resistance)

L39 ANSWER 4 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:817618 HCAPLUS Full-text

DOCUMENT NUMBER: 134:5985

TITLE: Low temperature-curable  
 alkoxysilyl-containing vinyl resin  
 compositions with long pot life and good  
 appearance and resistance to weather and  
 soiling

INVENTOR(S): Matsuo, Yoichi; Tamai, Hitoshi; Nanbu,  
 Toshiro; Kawaguchi, Hirotoshi; Ando, Naotami  
 PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000319578	A	20001121	JP 1999-132541	1999 0513

## 10/584,396-323714-EIC SEARCH

JP 2008138216 A 20080619 JP 2007-336917  
2007  
1227

PRIORITY APPLN. INFO.: JP 1999-132541 A3  
1999  
0513

ED Entered STN: 21 Nov 2000

AB The comps. comprise: (A) an alkoxy silyl-containing vinyl copolymer, (B) an organometallic compound such as organic tin compound at an amount of 0.1-20% (based on A), (C) a weak solvent such as aliphatic hydrocarbon, (D) a Si compound represented by a general formula: (R4O)4-bSiR5b, wherein R4, R5=C1-10 alkyl, aryl or aralkyl, or its partially hydrolyzed compound, (E) a silane coupling agent such as aminosilane and epoxysilane at an amount of 0.1-300%, (F) a hydrolyzable ester at an amount of 0.1-150%, and (G) a SH-containing hydrocarbon or/and mercaptosilane compound. Thus, heating the mixture of  $\gamma$ -methacryloxypropyltrimethoxysilane 7.9, Me methacrylate 34.6, iso-Bu methacrylate 17.0 and lauryl methacrylate 40.5 parts at 110° in xylene and MePh containing AIBN gave a resin A, 100 parts of which was mixed with 20 parts preformed dilution mixture of dibutyltin bis(Bu maleate) 5, Naphtha Number 6 (solvent) 41.5, a reaction product of aminoethylaminopropyltrimethoxysilane and  $\gamma$ -glycidoxypropyltrimethoxysilane (in a ratio of 1:2.2 as coupler) 8 and  $\gamma$ -mercaptopropyltrimethoxysilane 4 parts in 41.5 parts of isopropanol, 10 parts Et silicate 48 and 8 parts Me orthoacetate to give a title composition with 45% solid content and good claimed properties.

IT 15546-16-4, Dibutyltin bis(butyl maleate)

RL: CAT (Catalyst use); USES (Uses)

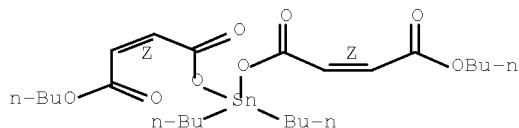
(hardening catalysts; low temperature-curable

alkoxysilyl-containing vinyl resin comps. with long pot life and good appearance and resistance to weather and soiling)

RN 15546-16-4 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-dibutyl ester (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C09D143-04

ICS C09D007-12

CC 42-10 (Coatings, Inks, and Related Products)

ST alkoxysilyl contg vinyl resin compn top coating; Low temp curable vinyl resin coating; pot life vinyl resin compn coating; weather soiling resistance vinyl resin compn coating; organometallic tin compd vinyl resin compn coating; weak solvent aliph hydrocarbon vinyl resin compn coating; silane coupling agent vinyl resin compn coating; hydrolyzable ester drying agent coating vinyl resin; mercaptosilane compd pot life improver vinyl resin coating; acrylic resin top coating compn

IT Isoalkanes

RL: NUU (Other use, unclassified); USES (Uses)

(C9-12, weak solvent; low temperature-curable

alkoxysilyl-containing vinyl resin comps. with long pot life and good appearance and resistance to weather and soiling)

IT Paraffin oils

RL: NUU (Other use, unclassified); USES (Uses)

(Exxsol D 40, weak solvent; low temperature-curable

alkoxysilyl-containing vinyl resin comps. with long pot life and

# 10/584,396-323714-EIC SEARCH

- good appearance and resistance to weather and soiling)
- IT Naphtha  
RL: NUU (Other use, unclassified); USES (Uses)  
(Naphtha 6, weak solvent; low temperature-~~curable~~  
alkoxysilyl-containing vinyl resin compns. with long pot life and  
good appearance and resistance to weather and soiling)
- IT Coating materials  
(antisoiling, weather-resistant; low temperature-~~curable~~  
alkoxysilyl-containing vinyl resin compns. with long pot life and  
good appearance and resistance to weather and soiling)
- IT Silanes  
RL: MOA (Modifier or additive use); USES (Uses)  
(coupling agent; low temperature-~~curable~~ alkoxysilyl-containing  
vinyl resin compns. with long pot life and good appearance and  
resistance to weather and soiling)
- IT Drying agents  
(low temperature-~~curable~~ alkoxy silyl-containing vinyl resin  
compns. useful as top coatings of construction materials such  
as metal, ceramics and concrete)
- IT Coating materials  
(low-temperature-~~curable~~; low temperature-~~curable~~  
alkoxysilyl-containing vinyl resin compns. with long pot life and  
good appearance and resistance to weather and soiling)
- IT Crosslinking catalysts  
(organometallic compds.; low temperature-~~curable~~  
alkoxysilyl-containing vinyl resin compns. with long pot life and  
good appearance and resistance to weather and soiling)
- IT Esters, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(ortho acid, dehydrating agent; low temperature-~~curable~~  
alkoxysilyl-containing vinyl resin compns. with long pot life and  
good appearance and resistance to weather and soiling)
- IT Acrylic polymers, uses  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
PRP (Properties); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(~~polysiloxane~~-; low temperature-~~curable~~  
alkoxysilyl-containing vinyl resin compns. with long pot life and  
good appearance and resistance to weather and soiling)
- IT Coupling agents  
(silanes; low temperature-~~curable~~ alkoxy silyl-containing vinyl  
resin compns. useful as top coatings of construction materials  
such as metal, ceramics and concrete)
- IT Ceramics  
Concrete  
(substrate; low temperature-~~curable~~ alkoxysilyl-containing  
vinyl resin compns. with long pot life and good appearance and  
resistance to weather and soiling)
- IT Metals, miscellaneous  
RL: MSC (Miscellaneous)  
(substrate; low temperature-~~curable~~ alkoxysilyl-containing  
vinyl resin compns. with long pot life and good appearance and  
resistance to weather and soiling)
- IT Coating materials  
(topcoats; low temperature-~~curable~~ alkoxysilyl-containing vinyl  
resin compns. with long pot life and good appearance and  
resistance to weather and soiling)
- IT Solvents  
(weak; low temperature-~~curable~~ alkoxy silyl-containing vinyl  
resin compns. useful as top coatings of construction materials  
such as metal, ceramics and concrete)
- IT 919-30-2,  $\gamma$ -Aminopropyltriethoxysilane 65169-82-6  
RL: MOA (Modifier or additive use); USES (Uses)  
(coupling agent; low temperature-~~curable~~ alkoxy  
silyl-containing vinyl resin compns. useful as top coatings of  
construction materials such as metal, ceramics and concrete)

## 10/584,396-323714-EIC SEARCH

- IT 51729-43-2  
RL: MOA (Modifier or additive use); USES (Uses)  
(coupling agent; low temperature-~~curable~~ alkoxyisilyl-containing vinyl resin compns. with long pot life and good appearance and resistance to weather and soiling)
- IT 149-73-5, Methyl orthoformate 1445-45-0, Methyl orthoacetate  
RL: MOA (Modifier or additive use); USES (Uses)  
(dehydrating agent; low temperature-~~curable~~ alkoxyisilyl-containing vinyl resin compns. with long pot life and good appearance and resistance to weather and soiling)
- IT ~~15545-16-4~~ 16-4, Dibutyltin bis(butyl maleate) 29881-72-9, Dibutyltin bis(oleyl maleate)  
RL: CAT (Catalyst use); USES (Uses)  
(hardening ~~catalysts~~; low temperature-~~curable~~ alkoxyisilyl-containing vinyl resin compns. with long pot life and good appearance and resistance to weather and soiling)
- IT 308279-33-6P 308279-34-7P 308790-03-6P, Butyl methacrylate-N-methylolacrylamide- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl methacrylate-MS 56S copolymer 308790-04-7P, Ethyl silicate 48-isobutyl methacrylate-lauryl methacrylate- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl methacrylate copolymer  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(low temperature-~~curable~~ alkoxyisilyl-containing vinyl resin compns. with long pot life and good appearance and resistance to weather and soiling)
- IT 112-55-0, Dodecyl mercaptan 4420-74-0,  $\gamma$ -Mercaptopropyltrimethoxysilane  
RL: MOA (Modifier or additive use); USES (Uses)  
(pot life improver; low temperature-~~curable~~ alkoxyisilyl-containing vinyl resin compns. with long pot life and good appearance and resistance to weather and soiling)
- IT 12616-83-0  
RL: MSC (Miscellaneous)  
(substrate; low temperature-~~curable~~ alkoxyisilyl-containing vinyl resin compns. with long pot life and good appearance and resistance to weather and soiling)
- IT 1330-20-7, Xylene, uses 308790-01-4, P 20 (solvent)  
RL: NUU (Other use, unclassified); USES (Uses)  
(weak solvent; low temperature-~~curable~~ alkoxyisilyl-containing vinyl resin compns. with long pot life and good appearance and resistance to weather and soiling)

L39 ANSWER 5 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 2000:389074 HCAPLUS Full-text

DOCUMENT NUMBER: 133:44998

TITLE: ~~Curable~~ resin compositions for matte topcoating materials and articles coated therewith

INVENTOR(S): Tamai, Hitoshi; Ando, Naotami; Kawaguchi, Hirotoshi

PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.

CODEN: JKXXAF

DOCUMENT TYPE: ~~Patent~~

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2000160103	A	20000613	JP 1998-337605	

1998

## 10/584,396-323714-EIC SEARCH

1127

JP 3954740 B2 20070808 <--  
 PRIORITY APPLN. INFO.: JP 1998-337605

1998  
 1127

OTHER SOURCE(S): MARPAT 133:44998

ED Entered STN: 13 Jun 2000

AB Vinyl monomers having hydrolyzable silyl groups (1-90 parts) and 10-99 parts other vinyl monomers are polymerized to conversion >50% in the 1st stage, subjected to the 2nd stage polymerization, mixed (100 parts) with Si compds. (RO)<sub>4</sub>-aSiR<sub>1</sub>a, where R, R<sub>1</sub> = C1-10 alkyl groups, C6-10 aryl groups, and C7-11 aralkyl groups, a = 0 or 1, and/or partial hydrolytic condensates thereof 0-200, curing catalysts 0.1-20, and silane coupling agents 0-20 parts to prepare coating materials. Thus, a topcoat contained 2-ethylhexyl methacrylate- $\gamma$ -methacryloxypropyltrimethoxysilane-Me methacrylate-N-methylolacrylamide copolymer 100, ES 148 (a tetraethoxysilane hydrolytic condensate) 15, 1:1 2-ethylhexanoic acid-dimethyldodecylamine salt-dibutyltin Bu maleate 0.5, 1:2 M Epikote 828- $\gamma$ -aminopropyltriethoxysilane reaction product 1, and A 1122 0.5 part.

IT 15546-16-4, Dibutyltin bis(butyl maleate)

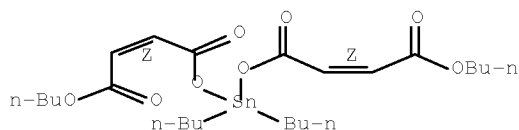
RL: CAT (Catalyst use); USES (Uses)

(curable vinyl silicone resin compns. for matte  
 topcoating materials)

RN 15546-16-4 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-dibutyl  
 ester (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C09D183-08

ICS C09D005-00; C09D133-00

CC 42-10 (Coatings, Inks, and Related Products)

ST matte topcoat vinyl silicone polymer; crosslinking  
 catalyst matte topcoat vinyl silicone polymer;  
 ethylhexanoic acid dimethyldodecylamine salt crosslinking  
 catalyst coating; butyltin butyl maleate  
 crosslinking catalyst coating

IT Coating materials

(antisoiling; curable vinyl silicone resin compns.  
 for matte topcoating materials)

IT Silanes

RL: MOA (Modifier or additive use); USES (Uses)  
 (coupling agents; curable vinyl silicone resin  
 compns. for matte topcoating materials)

IT Coupling agents

Crosslinking catalysts  
 (curable vinyl silicone resin compns. for matte  
 topcoating materials)

IT Coating materials

(matte; curable vinyl silicone resin compns. for  
 matte topcoating materials)

IT Vinyl compounds, uses

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical  
 or engineered material use); PREP (Preparation); USES (Uses)  
 (polymers, polysiloxane-; curable vinyl  
 silicone resin compns. for matte topcoating materials)

IT Epoxy resins, uses



# 10/584,396-323714-EIC SEARCH

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polysiloxanes-vinyl polymer-; curable vinyl silicone resin compns. for matte topcoating materials)

## IT Polymerization

(radical, two-step; curable vinyl silicone resin compns. for matte topcoating materials)

## IT Coating materials

(topcoats; curable vinyl silicone resin compns. for matte topcoating materials)

## IT Polysiloxanes, uses

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(vinyl polymer-; curable vinyl silicone resin compns. for matte topcoating materials)

## IT Coating materials

(weather-resistant; curable vinyl silicone resin compns. for matte topcoating materials)

## IT 15546-15-4, Dibutyltin bis(butyl maleate) 274678-05-6, 2-Ethylhexanoic acid dimethyldodecylamine salt

RL: CAT (Catalyst use); USES (Uses)  
(curable vinyl silicone resin compns. for matte topcoating materials)

## IT 274677-99-5P, 2-Ethylhexyl

methacrylate- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl methacrylate-N-methylolacrylamide copolymer 274678-00-1P, Lauryl methacrylate- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl methacrylate-N-methylolacrylamide-styrene copolymer 274678-01-2P,  $\gamma$ -Methacryloxypropyltrimethoxysilane-methyl methacrylate-N-methylolacrylamide-stearyl methacrylate copolymer 274678-02-3P, 2-Ethylhexyl acrylate-2-ethylhexyl methacrylate-isobutyl methacrylate- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl methacrylate-N-methylolacrylamide copolymer 274678-03-4P, Butyl acrylate-2-ethylhexyl methacrylate-isobutyl methacrylate- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl methacrylate-N-methylolacrylamide copolymer  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(curable vinyl silicone resin compns. for matte topcoating materials)

## IT 274678-04-5P 275354-03-5P, ESI 48-2-ethylhexyl

methacrylate- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl methacrylate-N-methylolacrylamide copolymer 275354-04-6P 275354-05-7P 275354-06-8P

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(curable vinyl silicone resin compns. for matte topcoating materials)

## IT 919-30-2D, $\gamma$ -Aminopropyltriethoxysilane, reaction products

with Epikote 828 1760-24-3 1760-24-3D, N- $\beta$ -(Aminoethyl)- $\gamma$ -aminopropyltrimethoxysilane, reaction products with  $\gamma$ -glycidoxypropyltrimethoxysilane 2530-83-8D,  $\gamma$ -Glycidoxypropyltrimethoxysilane, reaction products with N- $\beta$ -(aminoethyl)- $\gamma$ -aminopropyltrimethoxysilane 25068-38-6D, Epikote 828, reaction products with  $\gamma$ -aminopropyltriethoxysilane

RL: MOA (Modifier or additive use); USES (Uses)  
(silane coupling agent; curable vinyl silicone resin compns. for matte topcoating materials)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

## 10/584,396-323714-EIC SEARCH

ACCESSION NUMBER: 2000:267289 HCAPLUS Full-text  
 DOCUMENT NUMBER: 132:295225  
 TITLE: Storage-stable moisture-~~curable~~  
 resin compositions for top coating and the  
 coated articles  
 INVENTOR(S): Tamai, Hitoshi; Ando, Naotami; Inoue, Shoji;  
 Nanbu, Toshiro; Kawaguchi, Hirotoshi; Kono,  
 Yoshiyuki  
 PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: ~~Patent~~  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
JP 2000119590	A	20000425	JP 1998-293244	1998 1015
JP 2008144178	A	20080626	JP 2007-340468	2007 1228
PRIORITY APPLN. INFO.:				<-- JP 1998-293244 A3 1998 1015 <--

ED Entered STN: 25 Apr 2000

AB The compns. giving ~~cured~~ films with good adhesion to substrates and chemical, soiling and weather resistance, comprise (A) a base resin 100, (B) hydrocarbyloxysilicone compds. or their partial hydrolyzates, 0-200, (C) polyisocyanate ~~crosslinkers~~ 0.1-30, (D) organometal compds. as ~~curing catalysts~~ and (E) monoisocyanate compds. as moisture absorbents, 0.1-100 parts, where the A is selected from hydrolyzable silylated polymers, OH-containing fluoropolymers or/and acrylic polyols. Thus, polymerizing  $\gamma$ -methacryloxypropyltrimethoxysilane 10 with 2-hydroxyethyl methacrylate 5, Me methacrylate 25, Bu methacrylate 45, Bu acrylate 14 and acrylamide 1 part in the presence of AIBN gave a copolymer, 100 parts of which was homogenized with MKC Silicate MS 56S (Me silicate) 10, and Tipaque CR 95 (TiO<sub>2</sub>) 40 parts to give an enamel with solids content 6%. Mixing the enamel with HMDI 6, Bu<sub>2</sub>Sn bis(isooctylthioglycolate) 1 and tosyl isocyanate 2 phr and enough amount of a thinner to 45% solids content, and coating the resulting mixture on an epoxy pre-finished steel surface gave coat films with good room temperature ~~curability~~.

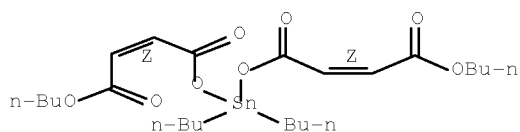
IT ~~15546-16-4~~, Dibutyltin bis(butyl maleate)

RL: CAT (Catalyst use); USES (Uses)  
 (curing catalysts; storage-stable moisture-  
~~curable~~ resin compns. for top coating and coated  
 articles)

RN 15546-16-4 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-dibutyl  
 ester (CA INDEX NAME)

Double bond geometry as shown.



# 10/584,396-323714-EIC SEARCH

IC ICM C09D143-04  
ICS B05D005-06; B05D007-24; C08G018-62

CC 42-10 (Coatings, Inks, and Related Products)

ST polyurethane silicone coating room temp curable;  
moisture curable siliconized urethane coating; storage  
stable moisture curable siliconized urethane coating;  
acrylic alkoxysilane urethane coating moisture curable;  
top coating acrylic silicone urethane moisture curable  
compn

IT Polyurethanes, uses  
Polyurethanes, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
or engineered material use); USES (Uses)  
(acrylic-polysiloxane-; storage-stable moisture-  
curable resin compns. for top coating and coated  
articles)

IT Polysiloxanes, uses  
Polysiloxanes, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
or engineered material use); USES (Uses)  
(acrylic-polyurethane-; storage-stable moisture-curable  
resin compns. for top coating and coated articles)

IT Coating materials  
Crosslinking catalysts  
(storage-stable moisture-curable resin compns. for  
top coating and coated articles)

IT 26062-01-1P, Acrylic acid-butyl acrylate-2-hydroxyethyl  
acrylate-methyl methacrylate copolymer 209971-73-3P,  
Acrylamide-butyl acrylate-2-hydroxyethyl  
methacrylate-γ-methacryloxypropyltrimethoxysilane-methyl  
methacrylate-styrene copolymer 214838-12-7P, Acrylamide-butyl  
acrylate-butyl methacrylate-2-hydroxyethyl  
methacrylate-3-methacryloxypropyltrimethoxysilane-methyl  
methacrylate copolymer 214838-14-9P, Acrylamide-butyl  
acrylate-2-hydroxyethyl methacrylate-γ-  
methacryloxypropyltrimethoxysilane-methyl methacrylate copolymer  
214838-18-3P, Butyl acrylate-butyl  
methacrylate-γ-methacryloxypropyltrimethoxysilane-methyl  
methacrylate;Placel FM 1;styrene copolymer  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
PREP (Preparation); USES (Uses)  
(base resin; storage-stable moisture-curable resin  
compns. for top coating and coated articles)

IT 13963-57-0, Aluminum tris(acetylacetonate) 15545-16-4,  
Dibutyltin bis(butyl maleate) 25168-24-5, Dibutyltin  
bis(isooctylthioglycolate) 214917-43-8  
RL: CAT (Catalyst use); USES (Uses)  
(curing catalysts; storage-stable moisture-  
curable resin compns. for top coating and coated  
articles)

IT 2525-62-4, Hexyl isocyanate 4083-64-1, Tosyl isocyanate  
RL: MOA (Modifier or additive use); USES (Uses)  
(moisture absorbents; storage-stable moisture-curable  
resin compns. for top coating and coated articles)

IT 215036-56-9, Acrylamide-butyl acrylate-butyl  
methacrylate-HMDI-2-hydroxyethyl  
methacrylate-γ-methacryloxypropyltrimethoxysilane-methyl  
methacrylate-MKC Silicate MS 56S copolymer 215036-57-0,  
Acrylamide-butyl acrylate-HMDI-2-hydroxyethyl  
methacrylate-γ-methacryloxypropyltrimethoxysilane-methyl  
methacrylate-MKC Silicate MS 56S copolymer 215036-61-6,  
Acrylamide-butyl acrylate-ESI 48-HMDI-2-hydroxyethyl  
methacrylate-γ-methacryloxypropyltrimethoxysilane-methyl  
methacrylate-MKC Silicate MS 56S copolymer 215036-65-0, Butyl  
acrylate-butyl methacrylate-HMDI-γ-  
methacryloxypropyltrimethoxysilane-methyl methacrylate-MKC

## 10/584,396-323714-EIC SEARCH

Silicate MS 56S-Placel FM 1-styrene copolymer 264626-13-3,  
 Acrylamide-butyl acrylate-butyl methacrylate-FR  
 3-HMDI-2-hydroxyethyl methacrylate- $\gamma$ -  
 methacryloxypropyltrimethoxysilane-methyl methacrylate copolymer  
 264626-14-4, Acrylamide-butyl acrylate-FR 3-2-hydroxyethyl  
 methacrylate-Lumiflon LF 100C- $\gamma$ -  
 methacryloxypropyltrimethoxysilane-methyl methacrylate-xylene  
 diisocyanate copolymer 264626-15-5, Acrylamide-butyl acrylate-FR  
 3-2-hydroxyethyl methacrylate-IPDI- $\gamma$ -  
 methacryloxypropyltrimethoxysilane-methyl methacrylate-styrene  
 copolymer 264626-16-6, Acrylamide-butyl acrylate-butyl  
 methacrylate-HMDI-2-hydroxyethyl  
 methacrylate- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl  
 methacrylate copolymer 264906-41-4, Acrylamide-butyl  
 methacrylate-butyl methacrylate-2-hydroxyethyl methacrylate-ESI  
 48- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl  
 methacrylate-2,4-TDI copolymer 264906-42-5, Acrylamide-acrylic  
 acid-butyl acrylate-butyl methacrylate-HMDI-2-hydroxyethyl  
 methacrylate- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl  
 methacrylate-MKC Silicate MS 56S copolymer 264906-43-6,  
 Acrylamide-butyl acrylate-butyl methacrylate-ESI  
 48-HMDI-2-hydroxyethyl methacrylate- $\gamma$ -  
 methacryloxypropyltrimethoxysilane-methyl methacrylate copolymer  
 264906-44-7, Acrylamide-butyl acrylate-ESI 48-HMDI-2-hydroxyethyl  
 methacrylate- $\gamma$ -methacryloxypropyltrimethoxysilane-methyl  
 methacrylate-styrene copolymer  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
 or engineered material use); USES (Uses)  
 (storage-stable moisture-curable resin compns. for  
 top coating and coated articles)

L39 ANSWER 7 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1999:751805 HCAPLUS Full-text  
 DOCUMENT NUMBER: 132:3919  
 TITLE: Easily mixable two-liquid adhesive  
 compositions having excellent storage  
 stability  
 INVENTOR(S): Nimura, Takahiro  
 PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: ~~Patent~~  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 11323297	A	19991126	JP 1998-130566	1998 0513

PRIORITY APPLN. INFO.: <--  
 JP 1998-130566  
 1998  
 0513

ED Entered STN: 26 Nov 1999

AB Title compns. comprise (A) agents containing modified silicones having  $\geq 1$  reactive Si group per mol., amines, and silanol condensation catalysts and (B) agents containing epoxy resins, thixotropic agents, precipitation inhibitors, and H<sub>2</sub>O. Thus, a two-liquid adhesive comprising an agent containing modified silicone (Silyl SAT 200) 100, 2,4,6-tris(dimethylaminomethyl)phenol (DMP 30) 20, a catalyst (Stann SB 65) 5, and CaCO<sub>3</sub> (Hakuenka CC) 80 parts and an agent containing Epikote 828 50, H<sub>2</sub>O 3, CaCO<sub>3</sub> 80,

## 10/584,396-323714-EIC SEARCH

and thixotropic agent (Disparlon 305) 10 parts showed good stability after storing at 40° for 3 mo. and tensile shear strength 28 kg/cm<sup>2</sup>.

IT 3669-02-1, Stann SB 65

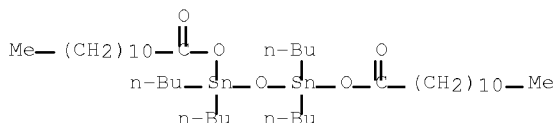
RL: CAT (Catalyst use); USES (Uses)

(silanol condensation catalyst; easily mixable

two-liquid adhesive compns. having good storage stability)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
INDEX NAME)



IC ICM C09J163-00

ICS C09J183-06

CC 38-3 (Plastics Fabrication and Uses)

ST adhesive two liq storage stability; silicone amine condensation  
catalyst adhesive; epoxy resin thixotropic agent adhesive;  
pptn inhibitor epoxy resin adhesive

IT Amines, uses

RL: CAT (Catalyst use); USES (Uses)

(crosslinking catalysts; easily mixable

two-liquid adhesive compns. having good storage stability)

IT Condensation reaction catalysts

Thixotropic agents

(easily mixable two-liquid adhesive compns. having good storage  
stability)

IT Epoxy resins, uses

Polydisiloxanes, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
or engineered material use); USES (Uses)

(easily mixable two-liquid adhesive compns. having good storage  
stability)

IT 90-72-2, DMP 30

RL: CAT (Catalyst use); USES (Uses)

(crosslinking catalyst; easily mixable

two-liquid adhesive compns. having good storage stability)

IT 3669-02-1, Stann SB 65

RL: CAT (Catalyst use); USES (Uses)

(silanol condensation catalyst; easily mixable

two-liquid adhesive compns. having good storage stability)

L39 ANSWER 8 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:648910 HCAPLUS Full-text

DOCUMENT NUMBER: 131:287799

TITLE: Curable acrylic siloxane  
deodorant coating

INVENTOR(S): Tamai, Hitoshi; Inoue, Shoji; Matsuo, Yoichi

PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 18 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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## 10/584,396-323714-EIC SEARCH

JP 11279480

A

19991012

JP 1998-100058

1998

0329

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JP 4007465

B2

20071114

JP 1998-100058

PRIORITY APPLN. INFO.:

1998

0329

&lt;--

ED Entered STN: 12 Oct 1999

AB Title coating useful for metal, ceramics, glass, plastics, etc., comprises an acrylic copolymer containing  $\geq 2$  hydrolytic silyl group and 2-50%  $\geq C_8$  alkyl methacrylate monomer units, a solvent containing  $\geq 50\%$  saturated hydrocarbon and/or  $\geq C_9$  aromatic hydrocarbon and/or terpene oil, a pigment, a hydrolytic ester, and a crosslinking catalyst. Thus,  $\gamma$ -methacryloxypropyltrimethoxysilane 15, stearyl methacrylate 10, Bu methacrylate 10, MMA 35 Bu acrylate 25, styrene 5 were polymerized, 100 parts of which was mixed with terpene oil 40, iron oxide 20, hydrolytic ester Me orthoacetate 8 and dibutyltinbutyl maleate 2,

$\gamma$ -methacryloxypropyltrimethoxysilane/stearyl methacrylate/Bu methacrylate/MMA/Bu acrylate/styrene/unsatd. polyester 40, silicate compound 30, silicate coupling agent 2, and  $\gamma$ -mercaptopropyltrimethoxysilane 1 part to form a coating, showing gloss 87, contact angle  $64^\circ$ , and good adhesion.

IT 15546-16-4, Dibutyltin bisbutylmaleate

17036-31-6, Dibutyltin bisoctylmaleate

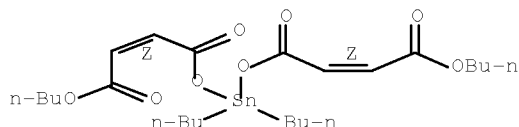
RL: CAT (Catalyst use); USES (Uses)

(catalyst; curable acrylic siloxane  
deodorant coating)

RN 15546-16-4 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-dibutyl  
ester (CA INDEX NAME)

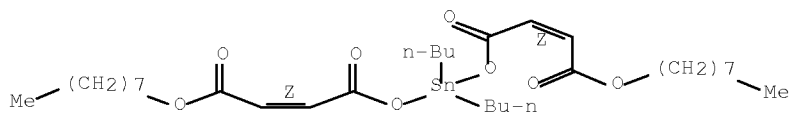
Double bond geometry as shown.



RN 17036-31-6 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-dioctyl  
ester (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C09D143-04

ICS C09D133-06; C09D167-02; C09D183-00

CC 42-10 (Coatings, Inks, and Related Products)

ST acrylic siloxane curable deodorant coating

IT Coating materials

Crosslinking catalysts

(curable acrylic siloxane deodorant  
coating)

IT Aromatic hydrocarbons, uses

## 10/584,396-323714-EIC SEARCH

Terpenes, uses

RL: NUU (Other use, unclassified); USES (Uses)

(solvent; ~~curable~~ acrylic siloxane  
deodorant coating)

IT Polyesters, uses

RL: IMF (Industrial manufacture); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)(unsatd.; ~~curable~~ acrylic siloxane  
deodorant coating)IT 149-57-5, 2-Ethylhexanoic acid 15546-18-4, Dibutyltin  
bisbutylmaleate 17036-31-6, Dibutyltin bisoctylmaleate

RL: CAT (Catalyst use); USES (Uses)

(catalyst; ~~curable~~ acrylic siloxane  
deodorant coating)

IT 112-18-5

RL: CAT (Catalyst use); USES (Uses)

(curable acrylic siloxane deodorant  
coating)IT 80-62-6DP, Methyl methacrylate, polymers with acrylic monomers,  
styrene and unsatd. polyesters 97-88-1DP, Butyl methacrylate,  
polymers with acrylic monomers, styrene and unsatd. polyesters  
100-42-5DP, Styrene, polymers with acrylic monomers and unsatd.  
polyesters 141-32-2DP, Butyl acrylate, polymers with acrylic  
monomers, styrene and unsatd. polyesters 2530-85-0DP,  
 $\gamma$ -Methacryloxypropyltrimethoxysilane, polymers with acrylic  
monomers, styrene and unsatd. polyesters 239081-60-8P,  
 $\gamma$ -Methacryloxypropyltrimethoxysilane-stearyl  
methacrylate-butyl methacrylate-methyl methacrylate-butyl  
acrylate-styrene copolymer 246042-92-2PRL: IMF (Industrial manufacture); TEM (Technical or engineered  
material use); PREP (Preparation); USES (Uses)(curable acrylic siloxane deodorant  
coating)

IT 149-73-5, Methyl orthoformate 56893-90-4, Methyl orthoacetate

RL: TEM (Technical or engineered material use); USES (Uses)

(curable acrylic siloxane deodorant  
coating)IT 147-14-8, Phthalocyanine Blue 1309-37-1, Iron oxide (Fe<sub>2</sub>O<sub>3</sub>),  
uses 13463-67-7, Tipaque CR 95, uses

RL: TEM (Technical or engineered material use); USES (Uses)

(pigment; ~~curable~~ acrylic siloxane  
deodorant coating)

IT 1330-20-7, Xylene, uses 12676-97-0, Shellsol

RL: NUU (Other use, unclassified); USES (Uses)

(solvent; ~~curable~~ acrylic siloxane  
deodorant coating)OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE  
THIS RECORD (1 CITINGS)

L39 ANSWER 9 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1999:250363 HCAPLUS Full-text

DOCUMENT NUMBER: 130:325826

TITLE: Process for manufacture of ~~curable~~  
silicone compositions characterized by mixing  
of curing catalysts and  
pigments

INVENTOR(S): Yamauchi, Yasushi

PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 11106519	A	19990420	JP 1997-273027
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1006

JP 1997-273027

1006

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IT 3669-02-1, SB 65

RN 3669-02-1 HCAPLUS

$$\begin{array}{c} \text{Me}-(\text{CH}_2)_{10}-\overset{\text{O}}{\parallel}\text{C}-\text{O} \\ | \qquad \qquad \qquad | \\ \text{n-Bu}-\text{Sn}-\text{O}-\text{Sn}-\text{O}-\overset{\text{O}}{\parallel}\text{C}-(\text{CH}_2)_{10}-\text{Me} \\ | \qquad \qquad \qquad | \\ \text{n-Bu} \qquad \qquad \text{n-Bu} \end{array}$$

ICS C08L083-04

ST curable silicone compn prepn efficiency;

IT Polysiloxanes, uses

IT Carbon black, uses

IT Crosslinking catalysts

Kneading apparatus

Process control

Page 24



## 10/584,396-323714-EIC SEARCH

efficiency saving steps for cleaning kneading containers)

IT 471-34-1, Viscolite U, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (colloidal; preparation of ~~curable~~ silicone compns. with  
 good efficiency saving steps for cleaning kneading containers)

IT 3669-02-1, SB 65  
 RL: CAT (Catalyst use); USES (Uses)  
 (crosslinking catalyst; preparation of  
~~curable~~ silicone compns. with good efficiency saving  
 steps for cleaning kneading containers)

IT 2768-02-7, TSL 8310  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (dehydrating agent; preparation of ~~curable~~ silicone  
 compns. with good efficiency saving steps for cleaning kneading  
 containers)

IT 117-81-7, DOP  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (plasticizer; preparation of ~~curable~~ silicone compns. with  
 good efficiency saving steps for cleaning kneading containers)

L39 ANSWER 10 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:799895 HCAPLUS Full-text

DOCUMENT NUMBER: 130:111258

TITLE: One-liquid moisture-~~curable~~  
 polyurethane adhesive compositions with good  
 workability

INVENTOR(S): Kobayashi, Masaya

PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 10330721	A	19981215	JP 1997-147999	1997 0605

PRIORITY APPLN. INFO.: <--  
 JP 1997-147999  
 1997  
 0605  
 <--

ED Entered STN: 22 Dec 1998

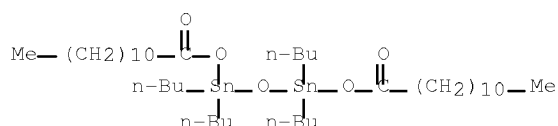
AB The compns. using no organic solvents and migrating diluents comprise urethane  
 prepolymers with both ends capped with NCO group, synthetic resins with  $\geq 2$  reactive  
 silyl groups and viscosity at 20° 100-15,000 mPa.s, and silanol condensation catalysts.  
 A composition comprised a urethane prepolymer from polypropylene glycol (Adeka  
 Polyether P3000) and 4,4'-MDI 100, Silyl SAT010 (a polyether containing  $\geq 2$   
 methyldimethoxysilyl groups) 50, Hakuenak CC (hydrophobilized CaCO<sub>3</sub>) 50, silanol  
 condensation catalyst (SB 65) 0.5, and U-Cat 2041 0.05 part, showing good adhesion and  
 workability.

IT 3669-02-1, SB 65

RL: CAT (Catalyst use); USES (Uses)  
 (silanol condensation catalysts; one-liquid moisture-  
~~curable~~ polyurethane adhesive compns. with good  
 workability)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
 INDEX NAME)



IC ICM C09J175-04  
 CC 38-3 (Plastics Fabrication and Uses)  
 ST one liq moisture curable polyurethane adhesive;  
 polyoxyalkylene polyurethane moisture curable adhesive;  
 silanol condensation catalyst moisture curable  
 adhesive  
 IT Adhesives  
 (moisture-curable; one-liquid moisture-curable  
 polyurethane adhesive compns. with good workability)  
 IT Polyurethanes, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use);  
 USES (Uses)  
 (one-liquid moisture-curable polyurethane adhesive  
 compns. with good workability)  
 IT Polyurethanes, uses  
 Polyurethanes, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use);  
 USES (Uses)  
 (polysiloxane-; one-liquid moisture-curable  
 polyurethane adhesive compns. with good workability)  
 IT Polysiloxanes, uses  
 Polysiloxanes, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use);  
 USES (Uses)  
 (polyurethane-; one-liquid moisture-curable  
 polyurethane adhesive compns. with good workability)  
 IT 219599-40-3, Polypropylene glycol-4,4'-MDI-Silyl SAT 10 copolymer  
 RL: PRP (Properties); TEM (Technical or engineered material use);  
 USES (Uses)  
 (one-liquid moisture-curable polyurethane adhesive  
 compns. with good workability)  
 IT 3669-02-1, SB 65  
 RL: CAT (Catalyst use); USES (Uses)  
 (silanol condensation catalysts; one-liquid moisture-  
 curable polyurethane adhesive compns. with good  
 workability)

L39 ANSWER 11 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1998:742611 HCAPLUS Full-text  
 DOCUMENT NUMBER: 130:53482  
 TITLE: Room-temperature-curable two-pot  
 adhesive compositions with good post-  
 cured strength and elasticity for tile  
 floors  
 INVENTOR(S): Nimura, Takahiro  
 PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 10306273	A	19981117	JP 1997-115690	

## 10/584,396-323714-EIC SEARCH

1997

0506

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JP 3447197

B2

20030916

PRIORITY APPLN. INFO.:

JP 1997-115690

1997

0506

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ED Entered STN: 23 Nov 1998

AB The compns., showing excellent self-leveling property, consist of a part A comprising polysiloxanes having reactive Si groups, silanol condensation catalysts and epoxy resin hardeners, 100, diluents 3-20, and CaCO<sub>3</sub> 25-100 parts, and a part B comprising epoxy resins 100, diluents 3-20, CaCO<sub>3</sub> 25-100, and water 0.5-5 parts. Thus, a mixture (as part A) of Silyl SAX 350 (modified silicone) 90, SB 65 2, DMP 30 (epoxy resin hardener) 8, a monoglycidyl ether compound 3, and Hakuenka CC 25 parts and a mixture (as part B) of Epikote 828 100, Et Cellosolve 10, Whiton SB 50, and water 1 parts were sep. prepared and combined at A/B weight ratio 128:81 to give an adhesive showing viscosity (20°) 1.7 + 104 mPa-s, thixotropic index (20°) 2.5, and area peeling strength 25 kg/cm<sup>2</sup> to a tile at pulling rate 50 mm/min.

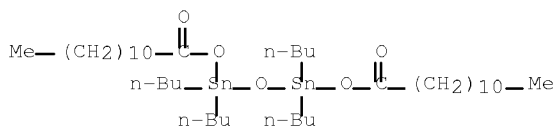
IT 3669-02-1, SB 65

RL: CAT (Catalyst use); USES (Uses)

(silanol condensation catalysts; room-temperature-curable two-pot tile adhesives containing epoxy resins and silicones with good strength and elasticity)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)



IC ICM C09J183-04

ICS C08G059-40; C09J163-00

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 58

ST tile floor adhesive polysiloxane epoxy blend;

cured elasticity polysiloxane tile adhesive;

water contg thixotropy tile adhesive; calcium carbonate viscosity

tile adhesive; two liq tile adhesive polysiloxane epoxy

IT Polysiloxanes, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(Silyl SAX 350; room-temperature-curable two-pot tile adhesives containing epoxy resins and silicones with good strength and elasticity)

IT Tiles

(room-temperature-curable two-pot tile adhesives containing epoxy resins and silicones with good strength and elasticity)

IT Epoxy resins, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(room-temperature-curable two-pot tile adhesives containing epoxy resins and silicones with good strength and elasticity)

IT Adhesives

(room-temperature-curable, two-pot; room-temperature-curable two-pot tile adhesives containing epoxy resins and silicones with good strength and elasticity)

IT 7732-18-5, Water, uses

RL: CAT (Catalyst use); USES (Uses)

## 10/584,396-323714-EIC SEARCH

(room-temperature-curable two-pot tile adhesives containing epoxy resins and silicones with good strength and elasticity)

IT 106831-79-2P, DMP 30-Epikote 828 copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(room-temperature-curable two-pot tile adhesives containing epoxy resins and silicones with good strength and elasticity)

IT 471-34-1, Homocal D, uses 214210-28-3, Hakuenka CC  
 RL: MOA (Modifier or additive use); USES (Uses)

(room-temperature-curable two-pot tile adhesives containing epoxy resins and silicones with good strength and elasticity)

IT 3669-02-1, SB 65  
 RL: CAT (Catalyst use); USES (Uses)

(silanol condensation catalysts; room-temperature-curable two-pot tile adhesives containing epoxy resins and silicones with good strength and elasticity)

L39 ANSWER 12 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:712303 HCAPLUS Full-text

DOCUMENT NUMBER: 129:332224

ORIGINAL REFERENCE NO.: 129:67725a,67728a

TITLE: Curable compositions for topcoating showing good adhesion and stain, solvent, and impact resistance and articles coated therewith

INVENTOR(S): Tamai, Hitoshi; Inoue, Masaharu

PATENT ASSIGNEE(S): Kaneka Corp., Japan

SOURCE: PCT Int. Appl., 40 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9846691	A1	19981022	WO 1998-JP1663	1998 0410
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W: US

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

JP 11286648	A	19991019	JP 1998-99644	1998 0410
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JP 3954721	B2	20070808		
EP 974629	A1	20000126	EP 1998-912760	1998 0410

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R: BE, DE, FR, GB, IT

US 6383648	B1	20020507	US 1999-402821	1999 1230
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PRIORITY APPLN. INFO.:	JP 1997-93265	A	1997 0411
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JP 1998-21892	A	1998 0203
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## 10/584,396-323714-EIC SEARCH

WO 1998-JP1663

W

1998

0410

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## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

ED Entered STN: 10 Nov 1998

AB The title compns. can be obtained by blending 100 parts acrylic copolymer having a (R1O)3-aSi(R2)aC.tplbond. group (R1 = H, C1-10 alkyl; R2 = H, C1-10 alkyl, aryl, aralkyl; a = 0-2) and a hydroxyl group with 2-70 parts (R3O)4-bSi(R4)b (R3, R4 = C1-10 alkyl, aryl, aralkyl; b = 0, 1) or a partial hydrolyzate thereof and 0.1-20 parts a ~~crosslinking~~ agent consisting of a compound having isocyanate groups. A polymer from  $\gamma$ -methacryloyloxypropyltrimethoxysilane, 2-hydroxyethyl methacrylate, Me methacrylate, Bu methacrylate, Bu acrylate, and acrylamide was used with MS56, titania, HMDI, and organotin catalyst over a V-Top midcoating.

IT 15546-16-4, Dibutyltin bis(butyl maleate)

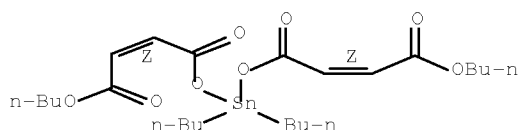
RL: CAT (Catalyst use); USES (Uses)

(~~curable~~ compns. for topcoating showing good adhesion and stain, solvent, and impact resistance and articles coated therewith)

RN 15546-16-4 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-dibutyl ester (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C09D175-00

ICS C09D183-06; B05D007-24

CC 42-10 (Coatings, Inks, and Related Products)

ST acrylic ~~polysiloxane~~ polyurethane topcoating

IT Polyurethanes, uses

Polyurethanes, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation);

TEM (Technical or engineered material use); PREP (Preparation);

USES (Uses)

(acrylic-~~polysiloxane~~-; ~~curable~~ compns. for topcoating showing good adhesion and stain, solvent, and impact resistance and articles coated therewith)

IT ~~Polysiloxanes~~, uses~~Polysiloxanes~~, uses

RL: IMF (Industrial manufacture); POF (Polymer in formulation);

TEM (Technical or engineered material use); PREP (Preparation);

USES (Uses)

(acrylic-polyurethane-; ~~curable~~ compns. for topcoating showing good adhesion and stain, solvent, and impact resistance and articles coated therewith)

IT Coating materials

(antistaining; ~~curable~~ compns. for topcoating showing good adhesion and stain, solvent, and impact resistance and articles coated therewith)

IT ~~Crosslinking catalysts~~

(~~curable~~ compns. for topcoating showing good adhesion and stain, solvent, and impact resistance and articles coated therewith)

IT Coating materials

Coating materials

(impact-resistant; ~~curable~~ compns. for topcoating showing good adhesion and stain, solvent, and impact resistance

# 10/584,396-323714-EIC SEARCH

- and articles coated therewith)
- IT Coating materials  
Coating materials  
(solvent-resistant; ~~curable~~ compns. for topcoating showing good adhesion and stain, solvent, and impact resistance and articles coated therewith)
- IT 15306-17-9, Aluminum tris(ethyl acetoacetate) 15546-16-4  
, Dibutyltin bis(butyl maleate) 25168-24-5, Dibutyltin bis(isooctyl thioglycolate) 214917-43-8  
RL: CAT (Catalyst use); USES (Uses)  
(~~curable~~ compns. for topcoating showing good adhesion and stain, solvent, and impact resistance and articles coated therewith)
- IT 215036-56-9P, Acrylamide-butyl acrylate-butyl methacrylate-HMDI-2-hydroxyethyl  
methacrylate-MS56-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate copolymer 215036-57-0P 215036-58-1P  
215036-59-2P, Acrylamide-butyl acrylate-2-hydroxyethyl methacrylate-MSI51-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate-xylene diisocyanate copolymer  
215036-60-5P, Butyl acrylate-butyl methacrylate-ESI40-HMDI-2-hydroxyethyl  
methacrylate-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate copolymer 215036-61-6P, Acrylamide-butyl acrylate-ESI40-HMDI-2-hydroxyethyl  
methacrylate-MSI51-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate copolymer 215036-62-7P, Butyl acrylate-butyl methacrylate-HMDI-2-hydroxyethyl  
methacrylate-MS56-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate copolymer 215036-63-8P, Acrylamide-butyl acrylate-HMDI-2-hydroxyethyl  
methacrylate-MS56-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate-styrene copolymer 215036-64-9P, Acrylamide-butyl acrylate-2-hydroxyethyl  
methacrylate-IPDI-MS56-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate-styrene copolymer 215036-65-0P, Butyl acrylate-butyl methacrylate-HMDI-MS56-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate-Placel FM1-styrene copolymer  
RL: IMF (Industrial manufacture); POF (Polymer in formulation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(~~curable~~ compns. for topcoating showing good adhesion and stain, solvent, and impact resistance and articles coated therewith)
- IT 161824-60-8P, Butyl acrylate-butyl methacrylate-2-hydroxyethyl methacrylate-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate copolymer 209971-73-3P, Acrylamide-butyl acrylate-2-hydroxyethyl methacrylate-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate-styrene copolymer 214838-12-7P, Acrylamide-butyl acrylate-butyl methacrylate-2-hydroxyethyl  
methacrylate-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate copolymer 214838-14-9P, Acrylamide-butyl acrylate-2-hydroxyethyl methacrylate-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate copolymer 214838-18-3P, Butyl acrylate-butyl methacrylate-γ-methacryloyloxypropyltrimethoxysilane-methyl methacrylate-Placel FM1-styrene copolymer  
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
(~~curable~~ compns. for topcoating showing good adhesion and stain, solvent, and impact resistance and articles coated therewith)

## 10/584,396-323714-EIC SEARCH

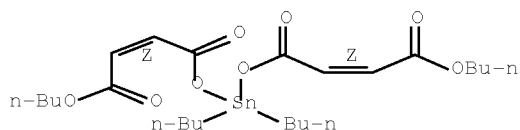
IT 112-55-0, Dodecyl mercaptan 4420-74-0,  
 $\gamma$ -Mercaptopropyltrimethoxysilane  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (curable compns. for topcoating showing good adhesion  
 and stain, solvent, and impact resistance and articles coated  
 therewith)  
 OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE  
 THIS RECORD (2 CITINGS)  
 REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L39 ANSWER 13 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1998:488173 HCAPLUS Full-text  
 DOCUMENT NUMBER: 129:190530  
 ORIGINAL REFERENCE NO.: 129:38697a,38700a  
 TITLE: Antisoiling ~~curable~~ topcoating  
 compositions with good recoatability and  
 adhesion on metals and glass  
 INVENTOR(S): Tamai, Hitoshi; Inoue, Shoji; Matsuo, Yoichi;  
 Nanbu, Toshiro  
 PATENT ASSIGNEE(S): Kanegafuchi Chemical Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 16 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: ~~Patent~~  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 10195374	A	19980728	JP 1997-4630	1997 0114
			<--	
JP 3522998	B2	20040426		
PRIORITY APPLN. INFO.:			JP 1997-4630	1997 0114
			<--	

ED Entered STN: 05 Aug 1998  
 AB The title compns. contain (A) 100 parts acrylic copolymers having C-bonded reacting  
 silyl group (R1O)3-aR2aSi- (R1 = H, C1-10 alkyl; R2 = H, C1-10 alkyl, aryl, aralkyl; a  
 = 0-2), (B) 2-70 parts (R3O)4-bSiR4b (or hydrolyzates) (R3 = C1-10 alkyl, aryl,  
 aralkyl; R4 = C1-10 alkyl, aryl, aralkyl; b = 0, 1), (C) ~~curing catalysts~~ containing  
 0.1-20 parts organotin ~~catalyst~~, (D) 0.5-50 parts compds. containing hydrolyzable  
 silyl group capable of coordinating to the organotin ~~catalyst~~ (C + D 0.6-25 parts), and  
 0.1-20 parts silane coupler. A composition comprised 10:30:45:14:1  $\gamma$ -  
 methacryloyloxypropyltrimethoxysilane-Me methacrylate-Bu methacrylate-Bu acrylate-  
 acrylamide copolymer 100, MSI51 50, dibutyltin butylmaleate 1.5, 3-  
 mercaptopropyltrimethoxysilane 0.8, 2.2:1  $\gamma$ -glycidoxypropyltrimethoxysilane-  
 aminoethylaminopropyltrimethoxysilane reaction product 2.0, and  $\gamma$ -  
 aminopropyltrimethoxysilane 0.5 part.  
 IT 15546-16-4, Dibutyltin bisbutyl maleate  
 RL: CAT (Catalyst use); USES (Uses)  
 (antisoiling ~~curable~~ topcoating compns. with good  
 recoatability and adhesion on metals and glass)  
 RN 15546-16-4 HCAPLUS  
 CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-dibutyl  
 ester (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C09D143-04  
 CC 42-10 (Coatings, Inks, and Related Products)  
 ST acrylic ~~siloxane~~ antisoiling topcoating; silane copuler  
 antisoiling topcoating  
 IT ~~Polysiloxanes~~, uses  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)  
 (acrylic; antisoiling ~~curable~~ topcoating compns. with  
 good recoatability and adhesion on metals and glass)  
 IT Coupling agents  
 Crosslinking catalysts  
 (antisoiling ~~curable~~ topcoating compns. with good  
 recoatability and adhesion on metals and glass)  
 IT Coating materials  
 (antisoiling; antisoiling ~~curable~~ topcoating compns.  
 with good recoatability and adhesion on metals and glass)  
 IT 15546-16-4, Dibutyltin bisbutyl maleate  
 RL: CAT (Catalyst use); USES (Uses)  
 (antisoiling ~~curable~~ topcoating compns. with good  
 recoatability and adhesion on metals and glass)  
 IT 83419-98-1P, Acrylamide-butyl acrylate-butyl  
 methacrylate- $\gamma$ -methacryloyloxypropyltrimethoxysilane-methyl  
 methacrylate copolymer 99716-61-7P, Butyl acrylate-butyl  
 methacrylate- $\gamma$ -methacryloyloxypropyltrimethoxysilane-methyl  
 methacrylate copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 TEM (Technical or engineered material use); PREP (Preparation);  
 USES (Uses)  
 (antisoiling ~~curable~~ topcoating compns. with good  
 recoatability and adhesion on metals and glass)  
 IT 112-18-5 149-57-5, 2-Ethylhexanoic acid 2530-83-8,  
 $\gamma$ -Glycidioxypropyltrimethoxysilane 3115-39-7, Dioctyl  
 phosphate 4420-74-0,  $\gamma$ -Mercaptopropyltrimethoxysilane  
 13822-56-5,  $\gamma$ -Aminopropyltrimethoxysilane  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (antisoiling ~~curable~~ topcoating compns. with good  
 recoatability and adhesion on metals and glass)  
 IT 11099-06-2, ESI 40 12002-26-5, MSI 51  
 RL: POF (Polymer in formulation); TEM (Technical or engineered  
 material use); USES (Uses)  
 (antisoiling ~~curable~~ topcoating compns. with good  
 recoatability and adhesion on metals and glass)

L39 ANSWER 14 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1998:427951 HCAPLUS Full-text  
 DOCUMENT NUMBER: 129:137069  
 ORIGINAL REFERENCE NO.: 129:28009a,28012a  
 TITLE: Adhesives for fixing equipments on roofs  
 INVENTOR(S): Yamauchi, Yasushi; Murayama, Yukihiro  
 PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: ~~Patent~~  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1



## 10/584,396-323714-EIC SEARCH

## PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10176158	A	19980630	JP 1996-339836	1996 1219

PRIORITY APPLN. INFO.: <-- JP 1996-339836 1996 1219

ED Entered STN: 11 Jul 1998

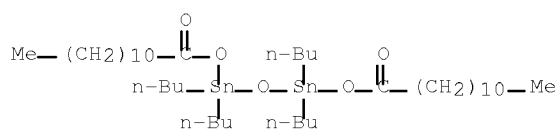
AB Title adhesives contain curing catalysts and modified silicones or polysulfides. An adhesive containing SB 65 and Excestar ES-S 3620 (hydrolyzable silyl-containing polyoxypropylene) showed an elongation of 3.8 mm after 2 wk at 20° and 65% relative humidity and good heat- and water-resistant adhesion when it was used to bind the steel frame of a solar energy system to the particle board of a roof.

IT 3669-02-1, SB 65

RL: CAT (Catalyst use); USES (Uses)  
(curable modified siloxane- or polysulfide-based adhesives for fixing equipments on roofs)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)



IC ICM C09J171-02

ICS C09J183-00

CC 38-3 (Plastics Fabrication and Uses)

ST roof equipment adhesive polyoxypropylene siloxane;  
modified polysulfide adhesive roof equipment

IT Roofs

(curable modified siloxane- or polysulfide-based adhesives for fixing equipments on roofs)

IT Polysulfides

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(curable modified siloxane- or polysulfide-based adhesives for fixing equipments on roofs)

IT Adhesives

Adhesives

(heat- and water-resistant; curable modified siloxane- or polysulfide-based adhesives for fixing equipments on roofs)

IT Synthetic rubber, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(polyether, [[[(mercaptoalkoxy)carbonyl]amino]alkyl]carbamoyl]-terminated, Permapol P 965; curable modified siloxane- or polysulfide-based adhesives for fixing equipments on roofs)

IT Polysiloxanes, uses

RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)

(polyoxypropylene-; curable modified siloxane

## 10/584,396-323714-EIC SEARCH

- or polysulfide-based adhesives for fixing equipments on roofs)

IT 136-23-2, Sanceler BZ 3669-02-1, SB 65 14484-64-1,  
Nocceler TTFE  
RL: CAT (Catalyst use); USES (Uses)  
(~~curable~~ modified siloxane- or  
polysulfide-based adhesives for fixing equipments on roofs)  
IT 75009-88-0, Excestar ES-S 3430 77396-40-8, Kaneka MS-S 303  
178535-69-8, Kaneka MS-S 203 210488-32-7, Excestar ES-S 3620  
RL: POF (Polymer in formulation); TEM (Technical or engineered  
material use); USES (Uses)  
(~~curable~~ modified siloxane- or  
polysulfide-based adhesives for fixing equipments on roofs)

L39 ANSWER 15 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1998:8753 HCAPLUS Full-text

DOCUMENT NUMBER: 128:116035

ORIGINAL REFERENCE NO.: 128:22741a,22744a

TITLE: Room-temperature-~~curable~~ resin  
compositions with good storability, adhesives,  
and related products therefrom

INVENTOR(S): Yagi, Motohiro

PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 20 pp.

CODEN: JKXXAF

DOCUMENT TYPE: ~~Patent~~

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 09328668	A	19971222	JP 1996-147407	1996 0610

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PRIORITY APPLN. INFO.: JP 1996-147407

1996

0610

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ED Entered STN: 08 Jan 1998

AB Title compns. and adhesives comprise epoxy compds. and oxazolidine compds. Reactive hot-melt adhesives containing the compns. and (A) thermoplastic resins and/or tackifying resins, and pressure-sensitive adhesives containing the compns., A, and (B) organic solvents are also claimed. The pressure-sensitive adhesives may comprise the compns., (C) hydrolyzable silyl group-containing resins, and (D) ~~curing catalysts~~ for C. Thus, 100 parts Epikote 828 (bisphenol A epoxy resin) was kneaded with 50 parts CaCO<sub>3</sub> and 10 parts TiO<sub>2</sub> under ≤20-Torr atmospheric and further kneaded with 1 part KBM 1003 (vinyltrimethoxysilane) and 132 parts Incozol 4 (bisoxazolidine) to give the claimed composition showing no change after 7 day at 50° in a can and good adhesion to a mortar piece.

IT 3669-02-1, SB 65

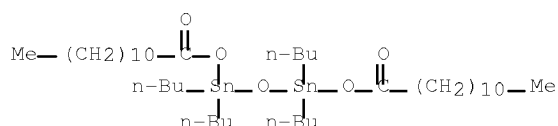
RL: CAT (Catalyst use); USES (Uses)

(~~silicone-curing catalysts~~; moisture-

~~curable~~ epoxy resin adhesives containing oxazolidine  
compds. with good storability)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
INDEX NAME)



- IC ICM C09J163-00  
ICS C08G059-40
- CC 38-3 (Plastics Fabrication and Uses)
- ST moisture ~~curable~~ epoxy adhesive oxazolidine contg;  
storage stability epoxy resin adhesive; pressure sensitive  
adhesive epoxy resin; reactive hot melt epoxy resin adhesive
- IT Polyurethanes, uses  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
PRP (Properties); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(epoxy-polyester-; moisture-~~curable~~ epoxy resin  
adhesives containing oxazolidine compds. with good storability)
- IT Polyurethanes, uses  
Polyurethanes, uses  
Polyurethanes, uses  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
PRP (Properties); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(epoxy-polyoxyalkylene-; moisture-~~curable~~ epoxy resin  
adhesives containing oxazolidine compds. with good storability)
- IT Polyesters, uses  
Polyoxyalkylenes, uses  
Polyoxyalkylenes, uses  
Polyoxyalkylenes, uses  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
PRP (Properties); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)  
(epoxy-polyurethane-; moisture-~~curable~~ epoxy resin  
adhesives containing oxazolidine compds. with good storability)
- IT Butadiene rubber, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
or engineered material use); USES (Uses)  
(epoxy-terminated, BF 1000; moisture-~~curable~~ epoxy  
resin adhesives containing oxazolidine compds. with good  
storability)
- IT Adhesives  
(hot-melt, reactive; moisture-~~curable~~ epoxy resin  
adhesives containing oxazolidine compds. with good storability)
- IT Resin acids  
RL: MOA (Modifier or additive use); PRP (Properties); TEM  
(Technical or engineered material use); USES (Uses)  
(hydrogenated, esters with glycerol, tackifiers; moisture-  
~~curable~~ epoxy resin adhesives containing oxazolidine  
compds. with good storability)
- IT Adhesives  
Tackifiers  
(moisture-~~curable~~ epoxy resin adhesives containing  
oxazolidine compds. with good storability)
- IT Epoxy resins, uses  
Polysiloxanes, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
or engineered material use); USES (Uses)  
(moisture-~~curable~~ epoxy resin adhesives containing  
oxazolidine compds. with good storability)
- IT Polyurethanes, uses  
RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
PRP (Properties); TEM (Technical or engineered material use); PREP

# 10/584,396-323714-EIC SEARCH

(Preparation); USES (Uses)  
 (polyester-, epoxy; moisture-curable epoxy resin  
 adhesives containing oxazolidine compds. with good storability)

IT Epoxy resins, uses  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PRP (Properties); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (polyester-polyurethane-; moisture-curable epoxy  
 resin adhesives containing oxazolidine compds. with good  
 storability)

IT Epoxy resins, uses  
 Epoxy resins, uses  
 Epoxy resins, uses  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PRP (Properties); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (polyoxyalkylene-polyurethane-; moisture-curable  
 epoxy resin adhesives containing oxazolidine compds. with good  
 storability)

IT Adhesives  
 (pressure-sensitive; moisture-curable epoxy resin  
 adhesives containing oxazolidine compds. with good storability)

IT Petroleum resins  
 RL: MOA (Modifier or additive use); PRP (Properties); TEM  
 (Technical or engineered material use); USES (Uses)  
 (tackifiers, FTR 7125, FTR 6110; moisture-curable  
 epoxy resin adhesives containing oxazolidine compds. with good  
 storability)

IT 9003-17-2  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
 or engineered material use); USES (Uses)  
 (butadiene rubber, epoxy-terminated, BF 1000; moisture-  
 curable epoxy resin adhesives containing oxazolidine  
 compds. with good storability)

IT 131756-18-8P, Butyl acrylate-Macromer C 4500-methyl methacrylate  
 copolymer 201337-87-3P, Bisphenol  
 A-dichloromethane-epichlorohydrin-polymethylene polyphenylene  
 isocyanate-polypropylene glycol copolymer 201337-88-4P,  
 Bisphenol A-Dynacoll 7360-epichlorohydrin-polymethylene  
 polyphenylene isocyanate copolymer 201337-89-5P, Butyl  
 acrylate-2-ethylhexyl acrylate-Macromer C 4500 copolymer  
 RL: IMF (Industrial manufacture); POF (Polymer in formulation);  
 PRP (Properties); TEM (Technical or engineered material use); PREP  
 (Preparation); USES (Uses)  
 (moisture-curable epoxy resin adhesives containing  
 oxazolidine compds. with good storability)

IT 201491-23-8, Incozol 4  
 RL: MOA (Modifier or additive use); PRP (Properties); TEM  
 (Technical or engineered material use); USES (Uses)  
 (moisture-curable epoxy resin adhesives containing  
 oxazolidine compds. with good storability)

IT 25068-38-6, Epikote 828 34590-59-5, Tactix 742 151437-95-5,  
 EPU 78-11 152521-71-6, Kaneka Silyl 5B25 157970-73-5, CX MN 77  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
 or engineered material use); USES (Uses)  
 (moisture-curable epoxy resin adhesives containing  
 oxazolidine compds. with good storability)

IT 3669-02-1, SB 65  
 RL: CAT (Catalyst use); USES (Uses)  
 (silicone-curing catalysts; moisture-  
 curable epoxy resin adhesives containing oxazolidine  
 compds. with good storability)

IT 110-82-7, Cyclohexane, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use);  
 USES (Uses)  
 (solvents; moisture-curable epoxy resin adhesives  
 containing oxazolidine compds. with good storability)

## 10/584,396-323714-EIC SEARCH

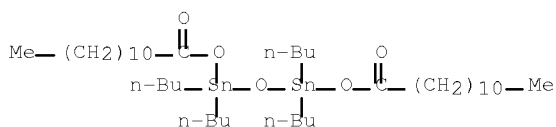
OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE  
THIS RECORD (1 CITINGS)

L39 ANSWER 16 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1997:701720 HCAPLUS Full-text  
DOCUMENT NUMBER: 127:320099  
ORIGINAL REFERENCE NO.: 127:62721a,62724a  
TITLE: Sealing compositions for fiber-reinforced  
plastic hot-water tanks  
INVENTOR(S): Yamauchi, Koji; Murayama, Yukihiro  
PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: ~~Patent~~  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 09279122	A	19971028	JP 1996-92449	1996 0415

PRIORITY APPLN. INFO.: <-- JP 1996-92449 1996  
0415  
<--

ED Entered STN: 07 Nov 1997  
AB The title compns. contain modified silicones (e.g., Excestar 3620, Excestar 3430, Excestar 2420, Kaneka MS-S 203, Kaneka MS-S 303) and hardening catalysts (e.g., SB-65).  
IT ~~3669-02-1~~, SB 65  
RL: CAT (Catalyst use); USES (Uses)  
(hardening catalysts; sealing compns. for fiber-reinforced plastic hot-water tanks)  
RN 3669-02-1 HCAPLUS  
CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)



IC ICM C09J183-04  
ICS C09K003-10  
CC 42-11 (Coatings, Inks, and Related Products)  
Section cross-reference(s): 38  
ST fiber reinforced plastic tank sealing compn; hot water plastic tank sealing compn; hardening catalyst  
polysiloxane sealing compn  
IT Crosslinking catalysts  
Sealing compositions  
(sealing compns. for fiber-reinforced plastic hot-water tanks)  
IT Polysiloxanes, uses  
RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)  
(sealing compns. for fiber-reinforced plastic hot-water tanks)  
IT ~~3669-02-1~~, SB 65  
RL: CAT (Catalyst use); USES (Uses)

## 10/584,396-323714-EIC SEARCH

(hardening catalysts; sealing compns. for  
fiber-reinforced plastic hot-water tanks)

L39 ANSWER 17 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1997:168093 HCAPLUS Full-text  
 DOCUMENT NUMBER: 126:158536  
 ORIGINAL REFERENCE NO.: 126:30651a,30654a  
 TITLE: Adhesives containing modified silicone  
 polymers for floor materials  
 INVENTOR(S): Yamauchi, Yasushi; Nishinaka, Koichi;  
 Murayama, Yukihiro  
 PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08325553	A	19961210	JP 1995-280311	1995 1027
JP 3540466	B2	20040707	JP 1995-280308	1995 1027
PRIORITY APPLN. INFO.: JP 1995-67487 A 1995 0327				

ED Entered STN: 12 Mar 1997

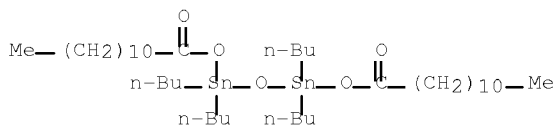
AB The adhesives mainly contain modified silicone polymers and their curing catalysts and show properties before curing of nonvolatile components ≥90%, viscosity 50,000-1,000,000 cP, and structural viscosity coefficient ≥4.0 and properties after curing of elongation at maximum load in tensile bonding test (JIS A 5758) ≥50% and permanent elongation (JIS K 6301) ≤50%. Excestar 3620 (modified silicone polymer) 100, SB 65 [bis(dibutyltin laurate) oxide] 2, dioctyl phthalate 70, Whiton P 30 (CaCO<sub>3</sub>) 150, CCR (colloidal CaCO<sub>3</sub>) 80, TSL 8310 (vinylsilane) 4, and TSL 8345 (aminosilane) 2 parts were vacuum kneaded to give an adhesive showing nonvolatiles 1%, viscosity 350,000, structural viscosity coefficient 5.8, elongation at maximum load 335%, and permanent elongation 5%.

IT 3669-02-1, SB 65

RL: CAT (Catalyst use); USES (Uses)  
 (adhesives containing modified silicone polymers and curing  
 catalysts for floor materials)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
 INDEX NAME)



IC ICM C09J183-12

CC 38-3 (Plastics Fabrication and Uses)

## 10/584,396-323714-EIC SEARCH

IT Polysiloxanes, uses  
 RL: PRP (Properties); TEM (Technical or engineered material use);  
 USES (Uses)  
 (S 203; adhesives containing modified silicone polymers and  
 curing catalysts for floor materials)

IT Crosslinking catalysts  
 Floors  
 (adhesives containing modified silicone polymers and curing  
 catalysts for floor materials)

IT Polysiloxanes, uses  
 Polysiloxanes, uses  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
 or engineered material use); USES (Uses)  
 (polyoxyalkylene-; adhesives containing modified silicone polymers  
 and curing catalysts for floor materials)

IT Polyoxyalkylenes, uses  
 Polyoxyalkylenes, uses  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
 or engineered material use); USES (Uses)  
 (polysiloxane-; adhesives containing modified silicone  
 polymers and curing catalysts for floor  
 materials)

IT 3669-02-1, SB 65  
 RL: CAT (Catalyst use); USES (Uses)  
 (adhesives containing modified silicone polymers and curing  
 catalysts for floor materials)

IT 77396-40-8, S 303 170006-60-7, Excestar 2410 186912-67-4,  
 Excestar 2420 186912-68-5, Excestar 3430 186912-69-6, Excestar  
 3620  
 RL: PRP (Properties); TEM (Technical or engineered material use);  
 USES (Uses)  
 (adhesives containing modified silicone polymers and curing  
 catalysts for floor materials)

L39 ANSWER 18 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1996:548339 HCAPLUS Full-text  
 DOCUMENT NUMBER: 125:170379  
 ORIGINAL REFERENCE NO.: 125:31887a,31890a  
 TITLE: Polyether-epoxy resin blend-based adhesive  
 compositions  
 INVENTOR(S): Futamura, Takahiro; Suematsu, Mikitoshi  
 PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 08151563	A	19960611	JP 1995-123608	1995 0523

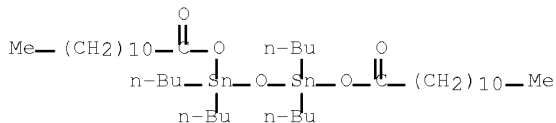
PRIORITY APPLN. INFO.: <-- JP 1994-232990 A1  
 1994  
 0928  
 <--

ED Entered STN: 14 Sep 1996

AB The title compns., with good processability at any temperature, comprise polyethers containing reactive Si group (e.g., Silyl 5B25, Silyl 5B30) 100, epoxy resins (e.g., Epikote 828XA) 30-70, colloidal lightwt. CaCO<sub>3</sub> (e.g., kalfain 200M) 50-120, fine powdered CaCO<sub>3</sub> (e.g., NCC-45) 10-100, heavywt. CaCO<sub>3</sub> (e.g., Whiton SB) 10-100, hydrophobic SiO<sub>2</sub> (e.g., Aerosil R-202) 2-10, organic Sn catalysts (e.g., SB-65) 0.5-5, and MePh, Cellosolve, MEK, and/or alcs. as solvents 5-50 parts.

## 10/584,396-323714-EIC SEARCH

IT 3669-02-1, SB-65  
 RL: CAT (Catalyst use); USES (Uses)  
 (polyether-epoxy resin blend-based adhesive compns.)  
 RN 3669-02-1 HCAPLUS  
 CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
 INDEX NAME)



IC ICM C09J171-02  
 ICS C09J163-00  
 CC 38-3 (Plastics Fabrication and Uses)  
 ST silicone polyether epoxy resin adhesive; calcium carbonate  
 polyether epoxy adhesive; hydrophobic silica polyether epoxy  
 adhesive; tin catalyst polyether epoxy adhesive; toluene  
 solvent polyether epoxy adhesive; Cellosolve solvent polyether  
 epoxy adhesive; MEK solvent polyether epoxy adhesive; alc solvent  
 polyether epoxy adhesive  
 IT ~~Siloxanes~~ and Silicones, uses  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
 or engineered material use); USES (Uses)  
 (polyether-, polyether-epoxy resin blend-based adhesive  
 compns.)  
 IT Polyethers, uses  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
 or engineered material use); USES (Uses)  
 (~~siloxane~~-, polyether-epoxy resin blend-based  
 adhesive compns.)  
 IT 3669-02-1, SB-65  
 RL: CAT (Catalyst use); USES (Uses)  
 (polyether-epoxy resin blend-based adhesive compns.)

L39 ANSWER 19 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1996:540642 HCAPLUS Full-text  
 DOCUMENT NUMBER: 125:170462  
 ORIGINAL REFERENCE NO.: 125:31899a,31902a  
 TITLE: ~~Moisture-curable~~ hot-melt and  
 pressure-sensitive adhesives  
 INVENTOR(S): Suematsu, Mikitoshi  
 PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: ~~Patent~~  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 08151562	A	19960611	JP 1994-292906	
				1994
				1128

PRIORITY APPLN. INFO.: <--  
 JP 1994-292906  
 1994  
 1128  
 <--



# 10/584,396-323714-EIC SEARCH

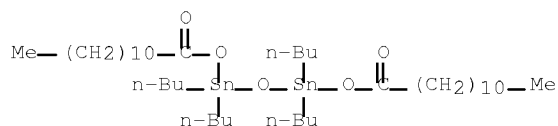
ED Entered STN: 10 Sep 1996

AB Title adhesives comprise oxyalkylene polymers terminated with  $\geq 1$  OH or hydrolytic silyl groups 100, organic Sn compds. 0.1-10, tackifier resins with softening point 70-130° 80-200, and  $\geq 1$  powdered inorg. fillers selected from Mg and Zn oxides 1-30 parts. Thus, Silyl SAT 200 100, Stann BL 0.5, FTR 6125 100, and Kyowamag 150 5 parts were mixed and kneaded at 150° to give a test piece showing good heat stability for 8 h and adhesive strength 3.2 kg/cm<sup>2</sup> after 2 h.

IT ~~3669-02-1~~, Stann SB 65  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (moisture-curable hot-melt and pressure-sensitive adhesives containing polyoxyalkylenes, tin compds., tackifiers, and powdered magnesium and zinc oxides)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)



IC ICM C09J171-02  
 ICS C08G065-32; C08K003-22; C08K005-57; C08L071-02; C09J201-10

CC 38-3 (Plastics Fabrication and Uses)

ST adhesive oxyalkylene polymer hydrolytic silicone; moisture curable adhesive polyoxyalkylene tackifier; magnesium oxide pressure sensitive adhesive; zinc oxide hot melt adhesive

IT Coumarone-indene resins  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (Escuron N 100, tackifiers; moisture-curable hot-melt and pressure-sensitive adhesives containing polyoxyalkylenes, tin compds., tackifiers, and powdered magnesium and zinc oxides)

IT Petroleum resins  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (FTR 6125, tackifiers; moisture-curable hot-melt and pressure-sensitive adhesives containing polyoxyalkylenes, tin compds., tackifiers, and powdered magnesium and zinc oxides)

IT Crosslinking catalysts  
 Tackifiers  
 (moisture-curable hot-melt and pressure-sensitive adhesives containing polyoxyalkylenes, tin compds., tackifiers, and powdered magnesium and zinc oxides)

IT Polyoxyalkylenes, uses  
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
 (siloxane-terminated; moisture-curable hot-melt and pressure-sensitive adhesives containing polyoxyalkylenes, tin compds., tackifiers, and powdered magnesium and zinc oxides)

IT Adhesives  
 (hot-melt, moisture-curable hot-melt and pressure-sensitive adhesives containing polyoxyalkylenes, tin compds., tackifiers, and powdered magnesium and zinc oxides)

IT Adhesives  
 (pressure-sensitive, moisture-curable hot-melt and pressure-sensitive adhesives containing polyoxyalkylenes, tin compds., tackifiers, and powdered magnesium and zinc oxides)

IT 1309-48-4, Kyowamag 150, uses 1314-13-2, Zinc oxide, uses  
 RL: CAT (Catalyst use); USES (Uses)  
 (curing catalysts; moisture-curable hot-melt and pressure-sensitive adhesives containing

## 10/584,396-323714-EIC SEARCH

polyoxyalkylenes, tin compds., tackifiers, and powdered magnesium and zinc oxides)

IT 77-58-7, Stann BL 3669-02-1, Stann SB 65  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (moisture-curable hot-melt and pressure-sensitive  
 adhesives containing polyoxyalkylenes, tin compds., tackifiers, and  
 powdered magnesium and zinc oxides)

IT 168679-71-8, Silyl SAT 200  
 RL: POF (Polymer in formulation); TEM (Technical or engineered  
 material use); USES (Uses)  
 (moisture-curable hot-melt and pressure-sensitive  
 adhesives containing polyoxyalkylenes, tin compds., tackifiers, and  
 powdered magnesium and zinc oxides)

L39 ANSWER 20 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:540610 HCAPLUS Full-text

DOCUMENT NUMBER: 125:170438

ORIGINAL REFERENCE NO.: 125:31895a,31898a

TITLE: Electrically conductive sealing compositions  
 containing aniline polymers

INVENTOR(S): Yamauchi, Yasushi; Nishinaka, Koichi

PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 08143794	A	19960604	JP 1994-289678	1994 1124

PRIORITY APPLN. INFO.: <--  
 JP 1994-289678  
 1994  
 1124

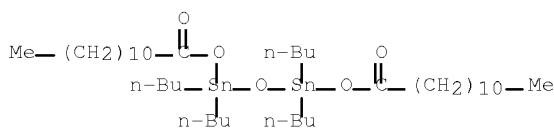
ED Entered STN: 10 Sep 1996

AB The title compns., useful for in constructions, civil engineering, etc., comprise aniline polymers and modified polysulfides with hardeners or modified silicones with hardeners. Thus, Permapol P-500 100, Nocceler TTFE 0.3, Sanceler BZ 0.3, Versicon 0.1, Diol 3000 (plasticizer) 60, Viscolite U 100, CR-90 20, and xylene 15 parts were mixed and kneaded in vacuo for 60 min to give title composition, which was molded to give a sheet showing volume resistivity 12.4  $\Omega$ -cm and good surface appearance.

IT 3669-02-1, SB 65  
 RL: CAT (Catalyst use); USES (Uses)  
 (crosslinking catalyst; elec. conductive  
 sealing materials comprising modified polysulfides or silicones  
 containing hardeners and aniline polymers)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
 INDEX NAME)



## 10/584,396-323714-EIC SEARCH

IC ICM C09D005-24  
ICS C09D005-34; C09D179-00; C09D181-02; C09D183-04; C09K003-10;  
H05K009-00

CC 38-3 (Plastics Fabrication and Uses)  
Section cross-reference(s): 76

ST elec conductive sealing material resin; aniline polymer elec  
conductor sealant; polyaniline elec conductor sealant resin;  
modified polysulfide sealant blend polyaniline; silicone modified  
sealant blend polyaniline; ~~crosslinking~~ agent modified  
polysulfide ~~siloxane~~

IT ~~Crosslinking~~ agents  
~~Crosslinking~~ catalysts  
Electric conductors  
(elec. conductive sealing materials comprising modified  
polysulfides or silicones containing hardeners and aniline  
polymers)

IT Polysulfides  
~~Siloxanes~~ and Silicones, uses  
RL: POF (Polymer in formulation); TEM (Technical or engineered  
material use); USES (Uses)  
(elec. conductive sealing materials comprising modified  
polysulfides or silicones containing hardeners and aniline  
polymers)

IT 143550-55-4, Permapol p 500  
RL: POF (Polymer in formulation); TEM (Technical or engineered  
material use); USES (Uses)  
(~~crosslinked~~; elec. conductive sealing materials  
comprising modified polysulfides or silicones containing hardeners  
and aniline polymers)

IT 136-23-2, Sanceler bz ~~3669-02-1~~, SB 65 6843-66-9,  
TSL 8172  
RL: CAT (Catalyst use); USES (Uses)  
(~~crosslinking~~ catalyst; elec. conductive  
sealing materials comprising modified polysulfides or silicones  
containing hardeners and aniline polymers)

IT 14484-64-1, Nocceler ttf  
RL: CAT (Catalyst use); USES (Uses)  
(~~crosslinking~~ catalysts; elec. conductive  
sealing materials comprising modified polysulfides or silicones  
containing hardeners and aniline polymers)

L39 ANSWER 21 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1996:197275 HCAPLUS Full-text  
DOCUMENT NUMBER: 124:263034  
ORIGINAL REFERENCE NO.: 124:48717a, 48720a  
TITLE: Phthalate-based plasticizers for soap- and  
water-resistant sealing compositions  
containing modified polysulfides or  
~~siloxanes~~

INVENTOR(S): Yamauchi, Yasushi; Nishinaka, Koichi  
PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan  
SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: ~~Patent~~  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 08003537	A	19960109	JP 1994-141448	1994 0623

PRIORITY APPLN. INFO.:

JP 1994-141448

1994

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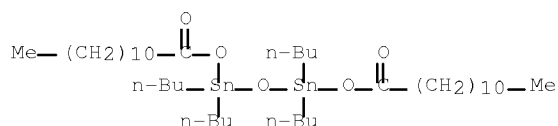
ED Entered STN: 06 Apr 1996

AB The title compns. useful for sealing buildings, ships, automobiles, etc., contain plasticizers obtained from phthalate esters of 2-propylheptanol (I) and/or 4-methyl-2-propylhexanol (II) for prolonging service life. Thus, 60 parts a plasticizer from phthalic acid and 90:10 mixture of I and II was mixed with Permapol P 500 (modified polysulfide) 100, 1:1 mixture of Nocceler TTFE and Sanceler Bz 0.6, CaCO<sub>3</sub> 100, TiO<sub>2</sub> 20, and xylene 15 parts to give a sealing composition

IT 3669-02-1, SB 65  
 RL: CAT (Catalyst use); USES (Uses)  
 (~~crosslinking catalysts~~; phthalate-based plasticizers for soap- and water-resistant sealing compns. containing)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)



IC ICM C09K003-10

CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 37

ST phthalate plasticizer water resistant sealant; modified polysulfide sealant water resistance; ~~siloxane~~ sealing material phthalate plasticizer; propylheptyl phthalate plasticizer sealant; methylpropylhexyl phthalate mixt plasticizer sealant; mortar sealing material phthalate plasticizer; soap resistant sealant phthalate plasticizer

IT ~~Crosslinking catalysts~~  
 (for phthalate-type plasticizers for modified polysulfide or ~~siloxane~~ sealing materials with water resistance)

IT Sealing compositions  
 (phthalate-type plasticizers for modified polysulfide or ~~siloxane~~ sealing materials with water resistance)

IT Polysulfides  
~~Siloxanes~~ and Silicones, uses  
 RL: POF (Polymer in formulation); TEM (Technical or engineered material use); USES (Uses)  
 (phthalate-type plasticizers for modified polysulfide or ~~siloxane~~ sealing materials with water resistance)

IT Mortar  
 (substrates; phthalate-type plasticizers for modified polysulfide or ~~siloxane~~ sealing materials with water resistance)

IT 136-23-2, Sanceler BZ 3669-02-1, SB 65 14484-64-1, Nocceler TTFE  
 RL: CAT (Catalyst use); USES (Uses)  
 (~~crosslinking catalysts~~; phthalate-based plasticizers for soap- and water-resistant sealing compns. containing)

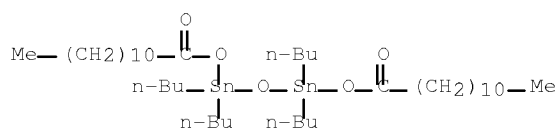
IT 6843-66-9, TSL 8172  
 RL: CAT (Catalyst use); USES (Uses)  
 (~~crosslinking co-catalysts~~; phthalate-based plasticizers for soap- and water-resistant sealing compns. containing)

## 10/584,396-323714-EIC SEARCH

ACCESSION NUMBER: 1996:115472 HCAPLUS Full-text  
 DOCUMENT NUMBER: 124:292563  
 ORIGINAL REFERENCE NO.: 124:54205a,54208a  
 TITLE: Electrically conducting sealing compositions  
 with electromagnetic shielding properties  
 INVENTOR(S): Yamauchi, Yasushi; Kinoshita, Tokihide;  
 Nishinaka, Koichi  
 PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: ~~Patent~~  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07310014	A	19951128	JP 1994-102640	1994 0517
			<--	
JP 3550179	B2	20040804		
PRIORITY APPLN. INFO.:			JP 1994-102640	1994 0517
			<--	

ED Entered STN: 24 Feb 1996  
 AB The title comps. contain carbon fibers, modified polysulfides or modified silicones, and ~~crosslinking catalysts~~ and are used for sealing joints between panels used as electromagnetic shields. A composition containing Permapol P 500, Nocceler TTFE (ferric dimethyldithiocarbamate), Sanceler BZ, carbon fibers, and other materials showed volume resistivity 8.6  $\Omega$ -cm after ~~curing~~.  
 IT ~~3669-02-1~~, SB 65  
 RL: CAT (Catalyst use); USES (Uses)  
 (~~catalysts~~; for ~~curing~~ of elec. conductive sealants containing carbon fibers for electromagnetic shielding)  
 RN 3669-02-1 HCAPLUS  
 CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)



IC ICM C08L081-04  
 ICS C08K007-06; C08L083-04; C09K003-10; H01B001-24; H05K009-00  
 CC 42-11 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 76  
 ST sealant carbon fiber cond electromagnetic shield; elec cond  
 sealant carbon fiber; polysulfide carbon fiber sealant elec cond;  
 silicone carbon fiber sealant elec cond; ~~crosslinking~~  
 polysulfone ~~siloxane~~ sealant elec cond  
 IT ~~Siloxanes~~ and Silicones, uses  
 RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical  
 or engineered material use); USES (Uses)  
 (ESS 410; in elec. conductive sealants containing carbon fibers for  
 electromagnetic shielding)  
 IT Sealing compositions  
 (~~curable~~ polysulfide and ~~siloxane~~ comps.

## 10/584,396-323714-EIC SEARCH

containing elec. conducting carbon fibers for electromagnetic shielding)

IT Crosslinking catalysts  
(for polysulfide- and siloxane-containing sealants containing carbon fibers for electromagnetic shielding)

IT Carbon fibers, uses  
RL: MOA (Modifier or additive use); USES (Uses)  
(in elec. conducting polysulfide- and siloxane-containing sealants for electromagnetic shielding)

IT Electric conductors  
(polysulfide- and siloxane-containing sealants containing carbon fibers for electromagnetic shielding)

IT Shields  
(electromagnetic, elec. conducting polysulfide- and siloxane-containing sealants containing carbon fibers for)

IT 14484-64-1, Ferric dimethyldithiocarbamate  
RL: CAT (Catalyst use); USES (Uses)  
(catalysts, Nocceler TTFE; for curing of elec. conductive sealants containing carbon fibers for electromagnetic shielding)

IT 136-23-2, Sanceler BZ 3669-02-1, SB 65  
RL: CAT (Catalyst use); USES (Uses)  
(catalysts; for curing of elec. conductive sealants containing carbon fibers for electromagnetic shielding)

IT 6843-66-9, Dimethoxydiphenylsilane  
RL: MOA (Modifier or additive use); USES (Uses)  
(for curing of elec. conductive sealants containing carbon fibers for electromagnetic shielding)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L39 ANSWER 23 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1996:82921 HCAPLUS Full-text

DOCUMENT NUMBER: 124:148342

ORIGINAL REFERENCE NO.: 124:27569a,27572a

TITLE: One-liquid moisture-curable modified silicone sealing compositions showing no tack after curing

INVENTOR(S): Yamauchi, Yasushi; Nishinaka, Koichi

PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 07286162	A	19951031	JP 1994-78539	1994 0418

PRIORITY APPLN. INFO.: <-- JP 1994-78539

1994  
0418

ED Entered STN: 08 Feb 1996

AB The compns. contain modified silicone polymers, curing catalysts, and liquid paraffins and are useful as sealants for building materials, automobiles, and ships (no data). Excestar 2410 (modified siloxane) 100, SB 65 (Sb compound) curing catalyst containing laurylamine 4, Moresco-White P-350P (liquid paraffin) 3, Diol 3000 (polypropylene glycol) 60, CaCO<sub>3</sub> 120, TiO<sub>2</sub> 20, and xylene 15 parts were mixed, kneaded, and defoamed to give title composition, which was molded and kept 2 wk at 20° and 65% relative humidity to give a tack-free sheet.

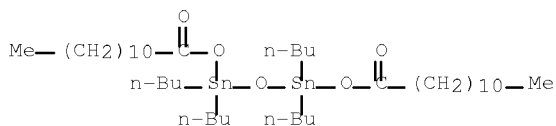
IT 3669-02-1, SB 65

## 10/584,396-323714-EIC SEARCH

RL: CAT (Catalyst use); USES (Uses)

(curing catalyst; one-liquid tack-free  
moisture-curable modified silicone sealing compns.  
containing)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
INDEX NAME)

IC ICM C09K003-10

ICS C09D005-34

CC 38-3 (Plastics Fabrication and Uses)

ST modified silicone sealing compn one liq; tack free

siloxane sealant; liq paraffin siloxane sealant

IT Paraffin oils

RL: MOA (Modifier or additive use); USES (Uses)

(one-liquid tack-free sealants containing modified siloxanes  
, curing catalysts and)

IT Sealing compositions

(one-liquid; moisture-curable tack-free modified  
silicone compns. containing curing catalysts  
and liquid paraffins)

IT Crosslinking catalysts

(tin compds.; one-liquid tack-free moisture-curable  
modified silicone sealing compns. containing)

IT 124-22-1, Laurylamine 3669-02-1, SB 65

RL: CAT (Catalyst use); USES (Uses)

(curing catalyst; one-liquid tack-free  
moisture-curable modified silicone sealing compns.  
containing)

IT 170006-60-7, Excestar 2410

RL: TEM (Technical or engineered material use); USES (Uses)

(one-liquid moisture-curable tack-free sealing compns.  
containing curing catalysts and liquid paraffins)OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE  
THIS RECORD (1 CITINGS)

L39 ANSWER 24 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:823272 HCAPLUS Full-text

DOCUMENT NUMBER: 123:342714

ORIGINAL REFERENCE NO.: 123:61495a,61498a

TITLE: One-liquid epoxy resin adhesives and adhesive  
tapes

INVENTOR(S): Horii, Kyuichi; Wakahara, Naoki

PATENT ASSIGNEE(S): Konishi Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 14 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 07188634	A	19950725	JP 1993-350437	1993

## 10/584,396-323714-EIC SEARCH

1227

PRIORITY APPLN. INFO.:

<--  
JP 1993-350437

1993

1227

&lt;--

ED Entered STN: 30 Sep 1995

AB The title adhesives, with good initial adhesion, comprise (a) epoxy resins, (b) ketimines R1CR2:NX1NHX2(NHX3)mN:CR3R4, R1CR2:NR5NH:CR3R4, R6(N:CR1R1)3 [R1-4 = H, C1-6 alkyl, (alkyl-substituted) Ph; R5 = diamine residue; R6 = triamine residue; X1-3 = C2-6 alkylene; m = 0 or 1], (c) modified silicones, (d) ~~catalysts~~ of the silicones, and (e) tackifiers.

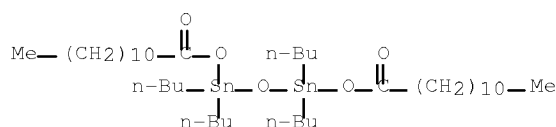
IT ~~3669-02-1~~, Stann SB-65

RL: CAT (Catalyst use); USES (Uses)

(one-liquid epoxy resin adhesives and adhesive tapes)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)



IC ICM C09J163-00

ICS C09J163-00; C08G059-40; C09J007-02

CC 38-3 (Plastics Fabrication and Uses)

IT ~~Siloxanes~~ and Silicones, uses

RL: MOA (Modifier or additive use); USES (Uses)

(one-liquid epoxy resin adhesives and adhesive tapes)

IT ~~3669-02-1~~, Stann SB-65

RL: CAT (Catalyst use); USES (Uses)

(one-liquid epoxy resin adhesives and adhesive tapes)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

L39 ANSWER 25 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1995:804809 HCAPLUS Full-text

DOCUMENT NUMBER: 124:11078

ORIGINAL REFERENCE NO.: 124:2263a,2266a

TITLE: Curable stainproof acrylic resin topcoating compositions containing alkoxysilanes

INVENTOR(S): Tamai, Hitoshi; Kusumi, Akira; Ando, Naotami

PATENT ASSIGNEE(S): Kanegafuchi Chemical Ind, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.

CODEN: JKXXAF

DOCUMENT TYPE: ~~Patent~~

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 07173429	A	19950711	JP 1993-319549	

1993

1220

&lt;--

JP 3385372

B2 20030310

PRIORITY APPLN. INFO.:

JP 1993-319549



1993

1220

&lt;--

ED Entered STN: 21 Sep 1995

AB Title compns. contain (A) 100 parts acrylic copolymers substituted with SiR<sub>2</sub>a(OR<sub>1</sub>)<sub>3</sub>-a (R<sub>1</sub> = C<sub>1</sub>-10 alkyl, Ph; R<sub>2</sub> = H, C<sub>1</sub>-10 alkyl, aryl, aralkyl; a = 0-2), (B) 2-70 parts R<sub>4</sub>bSi(OR<sub>3</sub>)<sub>4</sub>-b (R<sub>3</sub> = C<sub>1</sub>-10 alkyl; R<sub>4</sub> = C<sub>1</sub>-10 alkyl, Ph, alkoxy; b = 0-2) or their partial hydrolyzates, (C) 2-70 parts alkoxyethyl-substituted acrylic polymers prepared from A and B, and (D) 0.1-20 parts curing agents. Thus, 30:45:14:10:1 Me methacrylate (I)-Bu methacrylate-Bu acrylate (II)- $\gamma$ -methacryloxypropyltrimethoxysilane (III)-acrylamide copolymer 100, MSI 51 (partially condensed tetraalkoxysilane) 50, condensation product from 100 parts 40:50:10 I-II-III copolymer and 25 parts ESI 40 (partially condensed tetraalkoxysilane) 20, di(2-ethylhexyl) phosphate 0.25, and dimethyl laurylamine 0.25 part were mixed, blended with CR 90, diluted to give 45%-solid composition showing good compatibility, which was sprayed on an Al plate and cured at 23° for 7 days to give a test piece showing good staining resistance.

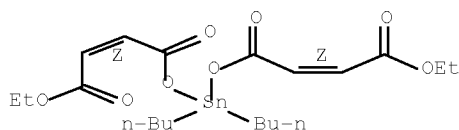
IT 13173-04-1 15546-16-4, Dibutyltinbisbutyl maleate

RL: CAT (Catalyst use); USES (Uses)  
(crosslinking catalysts; antisoiling top coatings containing silyl-substituted curable acrylic resins and alkoxy silanes with compatibility)

RN 13173-04-1 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-diethyl ester (CA INDEX NAME)

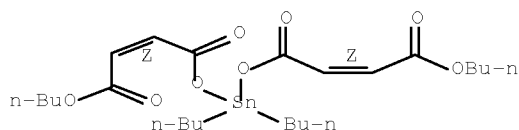
Double bond geometry as shown.



RN 15546-16-4 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-dibutyl ester (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C09D133-04

ICS C09D183-04

CC 42-10 (Coatings, Inks, and Related Products)

ST curable acrylic resin alkoxyethyl substituted; coating silicate blend acrylic resin; stainproof acrylic resin alkoxyethyl hydrolyzate; compatibility coating acrylic resin silicate

IT Coating materials

Crosslinking agents

Crosslinking catalysts

(antisoiling top coatings containing silyl-substituted curable acrylic resins and alkoxy silanes with

## 10/584,396-323714-EIC SEARCH

compatibility)  
 IT Glass, oxide  
 RL: MSC (Miscellaneous)  
 (substrates; antisoiling top coatings containing silyl-substituted curable acrylic resins and alkoxysilanes with compatibility)  
 IT Siloxanes and Silicones, uses  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (acrylic, antisoiling top coatings containing silyl-substituted curable acrylic resins and alkoxysilanes with compatibility)  
 IT 112-18-5  
 RL: CAT (Catalyst use); USES (Uses)  
 (antisoiling top coatings containing silyl-substituted curable acrylic resins and alkoxysilanes with compatibility)  
 IT 171423-52-2P 171423-53-3P 171423-54-4P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (antisoiling top coatings containing silyl-substituted curable acrylic resins and alkoxysilanes with compatibility)  
 IT 298-07-7, Di(2-ethylhexyl) phosphate 13173-04-1  
 15546-16-4, Dibutyltinbisbutyl maleate 29881-72-9,  
 Dibutyltinbisoleyl maleate  
 RL: CAT (Catalyst use); USES (Uses)  
 (crosslinking catalysts; antisoiling top coatings containing silyl-substituted curable acrylic resins and alkoxysilanes with compatibility)  
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L39 ANSWER 26 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1995:604287 HCAPLUS Full-text  
 DOCUMENT NUMBER: 123:230709  
 ORIGINAL REFERENCE NO.: 123:41181a,41184a  
 TITLE: Sealing compositions containing modified polysulfides or modified silicone polymers and lead powders  
 INVENTOR(S): Yamauchi, Yasushi; Nishinaka, Koichi  
 PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 07062327	A	19950307	JP 1993-210432	1993 0825

PRIORITY APPLN. INFO.: JP 1993-210432  
 1993  
 0825

ED Entered STN: 10 Jun 1995  
 AB The title sealing compns. with good sound insulating effect, useful for construction, contain (a) modified polysulfide polymers and their curing catalysts or (b) modified silicone polymers and their curing catalysts and 20-70% Pb powders. Thus, Permapol P 500 (PS) 100, 1/1 a mixture of dimethyldithiocarbamic acid Fe(1+) complex and Zn dibutyldithiocarbamate 0.6, Pb powder 60, Diol 3000 [poly(propylene glycol)] 60, and TiO2 20 parts were kneaded to give a sealing showing good sound-insulating effect,

## 10/584,396-323714-EIC SEARCH

elongation (JIS A 5758 test piece, aged at 20° and 30° for 2 wks., resp.) 520%, no cracking after 500 h in weatherometer, JIS A 5758 slump test 0 mm, and viscosity at 20° and 10 rpm 3+105 cps.

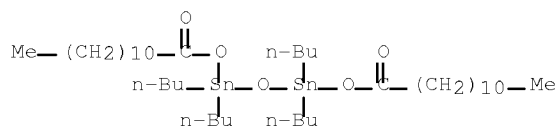
IT 3669-02-1, SB 65

RL: CAT (Catalyst use); USES (Uses)

(sealing compns. containing modified polysulfides or modified silicone polymers and lead powders for good sound insulation)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)



IC ICM C09K003-10

ICS C09D007-12; C09D175-04; C09D183-04

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 58

IT Catalysts and Catalysis

Sealing compositions

Sound insulators

(sealing compns. containing modified polysulfides or modified silicone polymers and lead powders for good sound insulation)

IT Polysulfides

Siloxanes and Silicones, uses

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(sealing compns. containing modified polysulfides or modified silicone polymers and lead powders for good sound insulation)

IT 136-23-2, Zinc dibutyldithiocarbamate 3669-02-1, SB 65  
79933-20-3

RL: CAT (Catalyst use); USES (Uses)

(sealing compns. containing modified polysulfides or modified silicone polymers and lead powders for good sound insulation)

L39 ANSWER 27 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:437300 HCAPLUS Full-text

DOCUMENT NUMBER: 121:37300

ORIGINAL REFERENCE NO.: 121:6875a,6878a

TITLE: Epoxy resin- and silicone-based adhesive compositions

INVENTOR(S): Murase, Toshiaki; Naruhiro, Shinji

PATENT ASSIGNEE(S): Sekisui Chemical Co. Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06001826	A	19940111	JP 1992-299718	1992 1110

<--

JP 3340159 B2 20021105  
PRIORITY APPLN. INFO.: JP 1992-104597 A1

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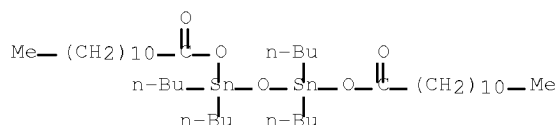
ED Entered STN: 23 Jul 1994

AB The compns. comprise silicone compds. having epoxy-reactive functional groups and reactive Si groups 100, epoxy resins 30-70, heavy CaCO<sub>3</sub> 20-50, organic antisagging agents 2-8, hydrophobic SiO<sub>2</sub> powders 5-15, organic Sn catalysts 0.5-3, and (1) fibrous inorg. fillers having aspect ratio  $\geq 3$  20-80 parts for cured products having high fire resistance and durability or (2) the fillers 5-50 parts and spherical inorg. fillers having grain size 30-70  $\mu\text{m}$  5-50 parts for cured products having high performance in shear and stringiness. An agent containing Silyl 5B25 (modified silicone compound) 40, Silyl 5B30 (modified silicone compound) 60, DMP 30 (curing agent) 5, Disparlon 305 (antisagging agent) 2, and Aerosil R 202 (hydrophobic SiO<sub>2</sub> powder) 2 parts was blended with an agent containing Epikote 828 50, SB 65 (organic Sn catalyst) 0.5, Whiton SB (heavy CaCO<sub>3</sub>) 20, Aerosil R 202 2, and wollastonite 20 parts to show high mixing performance. The mixture was used to bond a tile to an ALC plate, and the joined materials are heated at maximum temperature 840° to show no displacement of the tile.

IT 3669-02-1, SB 65  
RL: CAT (Catalyst use); USES (Uses)  
(catalysts, adhesives containing, with epoxy resins and silicones)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)



IC ICM C08G059-18  
ICS C09J163-00

CC 38-3 (Plastics Fabrication and Uses)

ST adhesive epoxy resin silicone fireproofing; calcium carbonate adhesive epoxy silicone; antisagging agent adhesive epoxy silicone; silica hydrophobic adhesive epoxy silicone; organotin catalyst adhesive epoxy silicone; inorg filler adhesive epoxy silicone

IT Tiles  
(adhesives for, calcium carbonate and antisagging agents and silica and organic tin catalysts and inorg. fillers compns. for)

IT Siloxanes and Silicones, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(epoxy, adhesives, calcium carbonate and antisagging agents and silica and organic tin catalysts and inorg. fillers in)

IT Adhesives  
(fire-resistant, epoxy resin-silicone blends, calcium carbonate and antisagging agents and silica and organic tin catalysts and inorg. fillers in)

IT Epoxy resins, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(siloxane-, adhesives, calcium carbonate and antisagging agents and silica and organic tin catalysts and inorg. fillers in)

IT 152848-61-8  
RL: TEM (Technical or engineered material use); USES (Uses)  
(adhesives, calcium carbonate and antisagging agents and silica and organic tin catalysts and inorg. fillers in)

IT 3669-02-1, SB 65  
RL: CAT (Catalyst use); USES (Uses)

## 10/584,396-323714-EIC SEARCH

(~~catalysts~~, adhesives containing, with epoxy resins and  
silicones)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE  
THIS RECORD (1 CITINGS)

L39 ANSWER 28 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:166990 HCAPLUS Full-text

DOCUMENT NUMBER: 120:166990

ORIGINAL REFERENCE NO.: 120:29433a,29436a

TITLE: One-liquid epoxy resin adhesives for floor  
coverings

INVENTOR(S): Sugita, Hiroshi; Kanemura, Atsushi; Wakahara,  
Naoki

PATENT ASSIGNEE(S): Konishi Kk, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: ~~Patent~~

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 05311141	A	19931122	JP 1992-139852	1992 0501

PRIORITY APPLN. INFO.: <--  
JP 1992-139852  
1992  
0501

ED Entered STN: 02 Apr 1994

AB Adhesives contain epoxy resins, ketimines, modified silicones, and ~~catalysts~~. Thus, an  
adhesive contained a modified silicone MS polymer 300 100, Epikote 828 35, CaCO<sub>3</sub> 266, a  
1:1 (molar) 2,4,12,14-tetramethyl-5,8,11-triaza-4,11-pentadecadiene- styrene oxide  
reaction product 4, A 171 silane 3, KBM 403 2, Stann SB-65 (a Bu<sub>2</sub>Sn compound) 2, and  
mineral spirit 20 parts.

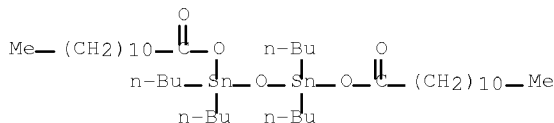
IT ~~3669-02-1~~, Stann SB 65

RL: CAT (Catalyst use); USES (Uses)

(~~catalysts~~, for ~~siloxanes~~, adhesive containing  
epoxy resins and, for floor coverings)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
INDEX NAME)



IC ICM C09J163-00

ICS C09J163-00; C09J183-04

CC 42-11 (Coatings, Inks, and Related Products)

Section cross-reference(s): 38

IT ~~Siloxanes~~ and Silicones, uses

RL: USES (Uses)

(adhesives containing epoxy resins and, for floor coverings)

IT Epoxy resins, uses

RL: USES (Uses)

(adhesives, ~~crosslinking~~ agents for, ketimines as)

# 10/584,396-323714-EIC SEARCH

IT Adhesives  
 (epoxy resins, crosslinking agents for, ketimines as)  
 IT Crosslinking agents  
 (ketimines, for epoxy resins, for adhesives)  
 IT Crosslinking catalysts  
 (tin compds., for siloxanes, adhesives containing epoxy  
 resins and, for floor coverings)  
 IT Imines  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (ket-, crosslinking agents, for epoxy resins, for  
 adhesives)  
 IT 3669-02-1, Stann SB 65  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, for siloxanes, adhesive containing  
 epoxy resins and, for floor coverings)  
 IT 96-09-3D, Styrene oxide, reaction products with  
 tetramethyltriazapentadecadiene 2426-08-6D, Butyl glycidyl  
 ether, reaction products with tetramethyltriazapentadecadiene  
 10595-60-5D, 2,4,12,14-Tetramethyl-5,8,11-triaza-4,11-  
 pentadecadiene, reaction products with Bu glycidyl ether and  
 styrene oxide  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (crosslinking agents, for epoxy resins, for  
 adhesives)

L39 ANSWER 29 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

ACCESSION NUMBER: 1994:136035 HCAPLUS Full-text

DOCUMENT NUMBER: 120:136035

ORIGINAL REFERENCE NO.: 120:23977a,23980a

TITLE: Air activated organotin catalysts  
 for silicone curing and polyurethane  
 preparation

AUTHOR(S): Jousseau, Bernard; Noiret, Nicolas; Pereyre,  
 Michel; Saux, Annie; Frances, Jean Marc

CORPORATE SOURCE: Lab. Chim. Org. Organomet., Univ. Bordeaux I,  
 Talence, F-33405, Fr.

SOURCE: Organometallics (1994), 13(3),  
 1034-8

CODEN: ORGND7; ISSN: 0276-7333

DOCUMENT TYPE: Journal

LANGUAGE: English

ED Entered STN: 19 Mar 1994

AB Upon exposure to air, 1,2-bis(acyloxy)tetraalkyldistannanes incorporated in mixts. of  
 either silicone oils and curing agent, or of isocyanates and alcs., are oxidized to  
 1,3-bis(acyloxy)tetraalkyldistannoxanes which show excellent catalytic properties for  
 curing silicones or for preparing polyurethanes. Under N, they induce longer pot lives  
 than the usual bis(acyloxy)dialkylstannane catalysts. Peralkylpolycyclostannanes,  
 obtained either by the Pa-catalyzed decomposition of dialkylstannanes or by reduction  
 of dichlorodialkylstannanes with metals, are also very good latent catalysts for  
 silicone curing. When incorporated into reactive mixts. under N, they do not catalyze  
 the condensation. Upon exposure to air, they are oxidized to active catalysts which  
 cure silicones. These di- or polystannanes can be considered air-activated latent  
 organotin catalysts.

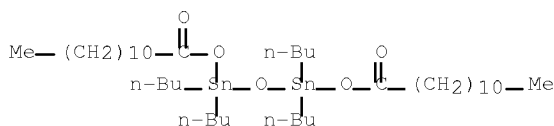
IT 3669-02-1P

RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP  
 (Preparation); USES (Uses)

(catalysts, prepared by air activation in-situ from  
 latent precursors, for polymerization in polyurethane preparation and for  
 curing of siloxanes)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
 INDEX NAME)



- CC 37-6 (Plastics Manufacture and Processing)  
Section cross-reference(s): 29
- ST air activated latent organotin catalyst; oxygen  
activated latent organotin catalyst; polyurethane prep  
latent organotin catalyst; polymn latent organotin  
catalyst polyurethane; siloxane curing  
latent organotin catalyst;  
bisacyloxytetraalkyldistannane latent crosslinking  
catalyst; alkylpolycyclostannane latent  
crosslinking catalyst
- IT Siloxanes and Silicones, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(Me hydrogen, curing of compns. containing, air-activated  
latent organotin catalysts for)
- IT Siloxanes and Silicones, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(hydroxy-terminated, curing of compns. containing,  
air-activated latent organotin catalysts for)
- IT Polymerization catalysts  
(latent, air-activated, for preparation of polyurethanes)
- IT Crosslinking catalysts  
(latent, air-activated, organotin compds., for  
siloxanes)
- IT Urethane polymers, preparation  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(polyoxyalkylene-, preparation of, air-activated latent  
bis(acyloxy)tetraalkyldistannane polymerization catalysts  
for)
- IT 3669-02-1P 5967-09-9P 45314-70-3P 69799-37-7P  
71968-01-9P 151751-17-6P  
RL: CAT (Catalyst use); SPN (Synthetic preparation); PREP  
(Preparation); USES (Uses)  
(catalysts, prepared by air activation in-situ from  
latent precursors, for polymerization in polyurethane preparation and for  
curing of siloxanes)
- IT 682-01-9, Tetrapropoxysilane  
RL: USES (Uses)  
(hydroxy-terminated silicone oil blends, curing of,  
air-activated latent organotin catalysts for)
- IT 77-58-7 1067-33-0 2781-10-4 3648-18-8 17586-94-6  
24577-34-2  
RL: USES (Uses)  
(latent air-activated catalysts, for polymerization in  
polyurethane preparation and for curing of  
siloxanes)
- IT 1111-33-7P, Dodecabutylcyclohexastannane 151751-18-7P  
151751-19-8P 151751-20-1P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(latent air-activated catalysts, preparation of, for  
curing of siloxanes)
- IT 122829-85-0P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, air-activated latent  
bis(acyloxy)tetraalkyldistannane polymerization catalysts  
for)
- IT 683-18-1, Dibutyldichlorostannane 3542-36-7,  
Dichlorodioctylstannane

## 10/584,396-323714-EIC SEARCH

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (reduction of, with metals, in preparation of latent air-activated  
 alkylpolycyclostannane curing catalysts for  
 siloxanes)

OS.CITING REF COUNT: 23 THERE ARE 23 CAPLUS RECORDS THAT CITE  
 THIS RECORD (23 CITINGS)

L39 ANSWER 30 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1991:634812 HCAPLUS Full-text  
 DOCUMENT NUMBER: 115:234812  
 ORIGINAL REFERENCE NO.: 115:40017a,40020a  
 TITLE: Antiblocking silicone emulsion manufacture and  
 use  
 INVENTOR(S): Li, Ping; Zhao, Guiquan; Liu, Shufen; et al.  
 PATENT ASSIGNEE(S): Chinese Academy of Sciences, Institute of  
 Chemistry, Peop. Rep. China  
 SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu,  
 13 pp.  
 CODEN: CNXXEV  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Chinese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
----- CN 1050732	A	19910417	CN 1990-109396	1990 1127
			<--	
CN 1029001	C	19950621	CN 1990-109396	1990 1127
PRIORITY APPLN. INFO.:				
			<--	

ED Entered STN: 29 Nov 1991

AB The title emulsions, giving rubber films useful on plastics, metals and paper, contain hydroxy silicone oils, alkyl alkoxy silicone oils, organic Sn catalysts, and additives. Thus, a mixture of hydroxy silicone emulsion 2, 35% Me ethoxy silicone emulsion 0.86, 40% dioctyltin bis (octyl maleate) 0.25, 5% poly(vinyl alc.). (II) 2, and H2O 4.89 parts was coated on II-primed paper, baked at 100° for 15 h, left at room temperature for 3 days, coated with a nondrying acrylic emulsion, baked at 140° for 20 h, and boned to paper to give a laminate with adhesion 8.5 g/2.5 cm.

IT ~~15546-16-4~~

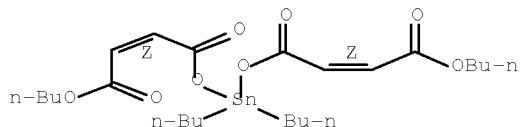
RL: USES (Uses)

(vulcanization accelerators, for silicone emulsions)

RN 15546-16-4 HCAPLUS

CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-dibutyl ester (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C09D005-02

CC 42-7 (Coatings, Inks, and Related Products)

Section cross-reference(s): 39, 43, 55, 56

ST antiblocking silicone rubber emulsion; tin



# 10/584,396-323714-EIC SEARCH

vulcanization accelerator; paper coating silicone emulsion;  
vulcanization accelerator silicone emulsion  
IT Rubber, silicone, uses and miscellaneous  
RL: USES (Uses)  
(emulsion coatings, antiblocking, compounding of)  
IT Vulcanization accelerators and agents  
(organotin compds., for silicone rubber emulsions)  
IT Coating materials  
(blocking-resistant, silicone rubber emulsions, compounding of)  
IT 77-58-7, Dibutyltin dilaurate 3648-18-8, Dioctyltin dilaurate  
~~15546-16-4~~ 24396-71-2 26401-97-8 33466-31-8  
52671-35-9 137378-31-5  
RL: USES (Uses)  
(vulcanization accelerators, for silicone emulsions)

L39 ANSWER 31 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
ACCESSION NUMBER: 1990:181627 HCAPLUS Full-text  
DOCUMENT NUMBER: 112:181627  
ORIGINAL REFERENCE NO.: 112:30711a,30714a  
TITLE: Curable silicone latex compositions  
for caulking  
INVENTOR(S): Stein, Judith; Leonard, Tracey Mayne  
PATENT ASSIGNEE(S): General Electric Co., USA  
SOURCE: Eur. Pat. Appl., 4 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 344449	A2	19891206	EP 1989-107218	1989 0421
<--				
EP 344449	A3	19910116		
R: BE, DE, ES, FR, GB, IT, NL, SE				
JP 02043262	A	19900213	JP 1989-136293	1989 0531
<--				
JP 07000743	B	19950111		
US 5034455	A	19910723	US 1989-416340	1989 1003
<--				
CA 2018002	A1	19910406	CA 1990-2018002	1990 0531
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PRIORITY APPLN. INFO.:			US 1988-200482	A 1988 0531
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## ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

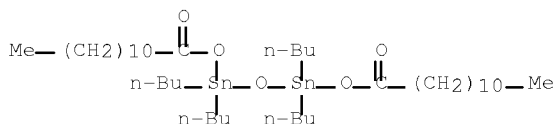
ED Entered STN: 12 May 1990

AB Curable storage-stable silicone latex compns., useful as caulking compns., comprise nonionic surfactant-stabilized silanol-terminated poly(dioorganosiloxane) emulsion 100, silane crosslinker 0.1-5, nonsiliceous filler ≤50, and a Sn catalyst 0.3-2 parts. The caulking compns. exhibit superior shelf life and excellent phys. properties. A base emulsion of silanol-terminated poly(dimethylsiloxane) stabilized with polyethylene glycol ether and pH adjusted with succinic acid was mixed with CaCO<sub>3</sub>, 0.5 g (based on

# 10/584,396-323714-EIC SEARCH

100 parts ~~siloxane~~) methyltrimethoxysilane, and 0.5 g dibutyltin dilaurate, and then cured for 1 wk to give a composition showing Shore A hardness 22, tensile strength 148 psi, and strain 513%. The compns. also maintained their elongation after aging for 2 mo.

IT 3669-02-1  
 RL: USES (Uses)  
 (vulcanization accelerators, for ~~silicone~~  
~~rubber~~ compns.)  
 RN 3669-02-1 HCAPLUS  
 CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
 INDEX NAME)



IC ICM C08L083-04  
 ICS C08K005-57; C08K013-02  
 CC 42-11 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 39  
 ST ~~silicone rubber~~ caulk surfactant stabilizer;  
 silane vulcanizer ~~silicone rubber~~ caulk; tin  
 compd vulcanization accelerator rubber  
 IT Vulcanization accelerators and agents  
 (silanes and tin compds., for ~~silicone rubber~~  
 compns.)  
 IT ~~Rubber, silicone, uses and miscellaneous~~  
 RL: USES (Uses)  
 (di-Me, latex, nonionic surfactant-stabilized, for caulking  
 compns.)  
 IT Caulking compositions  
 (moisture-curable, nonionic surfactant-stabilized  
~~silicone rubber~~ as, with good phys.  
 properties)  
 IT Surfactants  
 (nonionic, polyoxyalkylenes, for ~~silicone~~  
~~rubber~~ compns.)  
 IT 25322-68-3  
 RL: USES (Uses)  
 (surfactants, nonionic, for ~~silicone rubber~~  
 compns.)  
 IT 77-58-7 3669-02-1 10428-21-4 14230-28-5  
 RL: USES (Uses)  
 (vulcanization accelerators, for ~~silicone~~  
~~rubber~~ compns.)  
 IT 1185-55-3, Methyltrimethoxysilane  
 RL: USES (Uses)  
 (vulcanizing agents, for ~~silicone rubber~~  
 compns.)  
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE  
 THIS RECORD (1 CITINGS)

L39 ANSWER 32 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1989:499124 HCAPLUS Full-text  
 DOCUMENT NUMBER: 111:99124  
 ORIGINAL REFERENCE NO.: 111:16679a,16682a  
 TITLE: Shelf-stable ~~curable~~ silicone  
 caulking compositions stabilized by guanidine  
 derivatives  
 INVENTOR(S): Stein, Judith; Leonard, Tracey M.; Pratt,

## 10/584,396-323714-EIC SEARCH

PATENT ASSIGNEE(S): Sandra L.  
 SOURCE: General Electric Co., USA  
 U.S., 3 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4814368	A	19890321	US 1988-200349	1988 0531
EP 345446	A2	19891213	EP 1989-107215	1989 0421
EP 345446	A3	19910109		
R: BE, DE, ES, FR, GB, IT, NL, SE				
CA 1334454	C	19950214	CA 1989-598916	1989 0504
JP 02058591	A	19900227	JP 1989-136294	1989 0531
JP 05061316	B	19930906		
CA 1334456	C	19950214	CA 1989-602229	1989 0608
PRIORITY APPLN. INFO.:			US 1988-200349	A 1988 0531

ASSIGNMENT HISTORY FOR US PATENT AVAILABLE IN LSUS DISPLAY FORMAT

OTHER SOURCE(S): MARPAT 111:99124

ED Entered STN: 16 Sep 1989

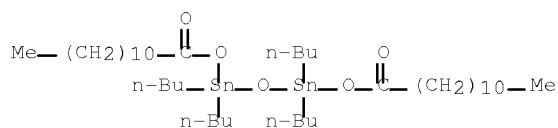
AB The title compns. contain a silanol-terminated siloxane emulsion, a silane crosslinker, a tin catalyst, a nonsiliceous filler, and a tetraalkylorganoguanidine. Mixing 1500 g silanol-terminated di-Me siloxane emulsion (50% solids) with 600 g precipitated CaCO<sub>3</sub>, combining the mixture (100 g) with (EtO)<sub>4</sub>Si 1.0, tetramethylbutylguanidine (I) 1.0, and [Bu<sub>2</sub>Sn(OAc)]<sub>2</sub>O 0.53 g gave a curable composition which was ungelled after 2 wk, vs. gelled without I.

IT 3669-02-1

RL: CAT (Catalyst use); USES (Uses)  
(catalysts, siloxane caulk containing,  
storage-stable)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
INDEX NAME)



## 10/584,396-323714-EIC SEARCH

IC ICM C08J007-14  
 INCL 524158000  
 CC 42-11 (Coatings, Inks, and Related Products)  
 Section cross-reference(s): 39  
 ST ~~siloxane~~ caulk shelf life guanidine; stabilizer  
 guanidine ~~siloxane~~ caulk; tin catalyst  
~~siloxane~~ shelf life; silane ~~siloxane~~ shelf life  
 IT ~~Rubber, silicone, uses and miscellaneous~~  
 RL: USES (Uses)  
 (caulk containing tin catalyst and, storage-stable)  
 IT Caulking compositions  
 (~~siloxane~~, containing tin catalyst,  
 storage-stable)  
 IT Vulcanization accelerators and agents  
 (tin compds., ~~siloxane~~ caulk containing, storage-stable)  
 IT ~~Siloxanes and Silicones, uses and miscellaneous~~  
 RL: USES (Uses)  
 (di-Me, hydroxy-terminated, ~~curable~~ caulk containing,  
 storage-stable)  
 IT 77-58-7, Dibutyltindilaurate 1724-80-7 3669-02-1  
 5967-09-9 6995-90-0 10428-19-0 10428-21-4 14230-28-5  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, ~~siloxane~~ caulk containing,  
 storage-stable)  
 IT 25037-57-4, Octamethylcyclotetrasiloxane homopolymer  
 RL: USES (Uses)  
 (caulk containing, shelf life of, guanidine derivative for improved)  
 IT 471-34-1, Calcium carbonate, uses and miscellaneous  
 RL: USES (Uses)  
 (fillers, ~~siloxane~~ caulk containing, storage-stable)  
 IT 78-10-4, Tetraethoxysilane  
 RL: USES (Uses)  
 (~~siloxane~~ caulk containing, storage-stable)  
 IT 27931-45-9  
 RL: USES (Uses)  
 (stabilizers, for ~~curable~~ ~~siloxane~~ caulk  
 containing tin catalyst)  
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE  
 FOR THIS RECORD. ALL CITATIONS AVAILABLE  
 IN THE RE FORMAT

L39 ANSWER 33 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1983:73396 HCAPLUS Full-text  
 DOCUMENT NUMBER: 98:73396  
 ORIGINAL REFERENCE NO.: 98:11247a,11250a  
 TITLE: Composition for rigid polyurethane foam  
 INVENTOR(S): Tsybul'ko, N. N.; Martinovich, F. S.; Satsura,  
 V. M.; Mandrikova, A. I.  
 PATENT ASSIGNEE(S): Belorussian Technological Institute, USSR  
 SOURCE: U.S.S.R. From: Otkrytiya, Izobret., Prom.  
 Obraztsy, Tovarnye Znaki 1982, (34), 118.  
 CODEN: URXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Russian  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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SU 958432	A1	19820915	SU 1979-2761563	1979 0503

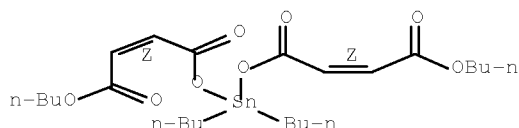
PRIORITY APPLN. INFO.: SU 1979-2761563  
 1979  
 0503

## 10/584,396-323714-EIC SEARCH

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ED Entered STN: 12 May 1984  
 AB Polyurethane foam with good strength, flame resistance, and thermal stability is prepared from polyether polyols 60-85, tetraoxypropylated diamine 17-28, block siloxane 1.3-1.8, CC13F 25-35, H2O 0.5-1.0, polyisocyanate 140-160, (ClCH2CH2O)3PO [115-96-8] 2-25, and a curing catalyst [N(C2H4OH)3 [102-71-6] 4-8 and Bu2Sn bis(Bu maleate) [15546-16-4] 0.1-0.5 parts].  
 IT 15546-16-4  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalyst, for crosslinking of polyurethane foams)  
 RN 15546-16-4 HCAPLUS  
 CN 2-Butenedioic acid (2Z)-, 1,1'-(dibutylstannylene) 4,4'-dibutyl ester (CA INDEX NAME)

Double bond geometry as shown.



IC C08G018-14; C08L075-08  
 CC 37-6 (Plastics Manufacture and Processing)  
 ST polyurethane foam fire resistance; triethanolamine catalyst crosslinking; tin maleate catalyst crosslinking; catalyst crosslinking polyurethane foam; siloxane polyurethane foam  
 IT Siloxanes and Silicones, uses and miscellaneous  
 RL: USES (Uses)  
 (in fire-resistant polyurethane foams)  
 IT Crosslinking catalysts  
 (triethanolamine-dibutyltin bis(Bu maleate), for polyurethane foams)  
 IT 102-71-6, uses and miscellaneous 15546-16-4  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalyst, for crosslinking of polyurethane foams)  
 OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

L39 ANSWER 34 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1972:449831 HCAPLUS Full-text  
 DOCUMENT NUMBER: 77:49831  
 ORIGINAL REFERENCE NO.: 77:8265a,8268a  
 TITLE: Curing silicone rubber compositions using Harada complexes as catalysts  
 INVENTOR(S): Leebrick, John R.  
 PATENT ASSIGNEE(S): Cosan Chemical Corp.  
 SOURCE: U.S., 3 pp.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 3661887	A	19720509	US 1970-35289	

## 10/584,396-323714-EIC SEARCH

1970  
0506

BE 766730 A1 19711105 BE 1971-103058

1971  
0505

FR 2088384 A5 19720107 FR 1971-16272

1971  
0505

PRIORITY APPLN. INFO.: US 1970-35289 A

1970  
0506

US 1971-130825 A

1971  
0402

ED Entered STN: 12 May 1984

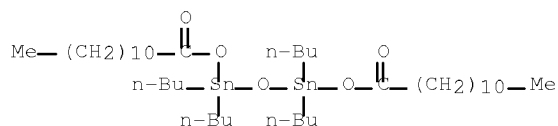
AB Harada complexes such as dimethyltin oxide-oleic acid complex (I) [35324-94-8] and dibutyltin oxide-lauric acid complex [35378-40-6] were prepared and used for the rapid curing of ~~silicone rubbers~~ to products having improved stability and corrosion resistance, useful as sealants. Thus, I was prepared by treating 1 mole Me<sub>2</sub>SnO with 1 mole oleic acid at 120.deg.. RTV-60 containing 0.5% I was cured in 77 min, as compared to 99 min when using 1% dibutyltin dilaurate (II). At elevated temps., RTV-602 was cured with I in 10 min, as compared to 120 min with II.

IT 3669-02-1

RL: USES (Uses)  
(vulcanization accelerators for ~~silicone rubber~~ from Harada)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA INDEX NAME)



IC C08H

INCL 260018000S

CC 38-10 (Elastomers, Including Natural Rubber)

ST crosslinking ~~silicone rubber~~; Harada complex ~~silicone rubber~~; sealant ~~silicone rubber~~; tin complex crosslinking agent; oleic acid tin complex; lauric acid tin complex

IT Vulcanization accelerators  
(Harada complexes, for ~~silicone rubber~~)

IT Sealing compositions  
(~~silicone rubber~~, corrosion-resistant)

IT Rubber, ~~silicone~~  
(vulcanization of, Harada complexes as accelerators for)

IT 3669-02-1 35324-94-8

RL: USES (Uses)  
(vulcanization accelerators for ~~silicone rubber~~ from Harada)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD (3 CITINGS)

L39 ANSWER 35 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN

## 10/584,396-323714-EIC SEARCH

ACCESSION NUMBER: 1969:451348 HCAPLUS Full-text  
 DOCUMENT NUMBER: 71:51348  
 ORIGINAL REFERENCE NO.: 71:9487a,9490a  
 TITLE: Room temperature hardenable  
~~organopolysiloxane~~ elastomers  
 INVENTOR(S): Neuroth, Charles G.  
 PATENT ASSIGNEE(S): Stauffer Chemical Co.  
 SOURCE: Ger. Offen., 22 pp.  
 CODEN: GWXXBX  
 DOCUMENT TYPE: ~~Patent~~  
 LANGUAGE: German  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO. -----	KIND ----	DATE -----	APPLICATION NO. -----	DATE
DE 1803273	B2	19740228	DE 1968-1803273	1968 1016
			<--	
DE 1803273	C3	19741017		
GB 1223572	A	19710224	GB 1968-1223572	1968 0916
			<--	
FR 1585345	A	19700116	FR 1968-1585345	1968 1007
			<--	
CH 520735	A	19720331	CH 1968-520735	1968 1015
			<--	
BE 722442	A	19690417	BE 1968-722442	1968 1017
			<--	
SE 382463	B	19760202	SE 1968-14018	1968 1017
			<--	
NL 6814948	A	19690422	NL 1968-14948	1968 1018
			<--	
PRIORITY APPLN. INFO.:			US 1967-676091	A 1967 1018
			<--	

ED Entered STN: 12 May 1984

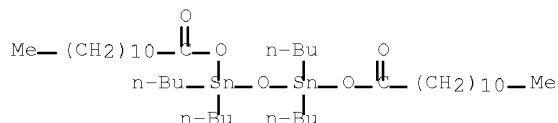
AB The title compds. are prepared with the aid of a Sn-containing accelerator. Thus, a mixture of styrene 62.5, Bu acrylate 57, OH-terminated liquid poly(~~dimethylsiloxane~~) 79.7, and di-tert-Bu peroxide 0.6 part was heated 4 hrs. at 130°, the residual monomers removed, and to 50 parts of the resultant polymer were added naphtha 8, (EtO)4Si 0.5, and (Bu2SnCl)2O 0.2 part and the resultant mixture applied to a smooth surface. The resultant coating was tack-free after 20 min. Other accelerators used were Bu2Sn(OH)Cl, O(Bu2Sn)2 dilaurate, (Et2SnCl)2O, O(Bu2Sn)2 distearate, and EtSnOSnEt tetralaurate.

IT 3669-02-1

RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, for curing of silicone  
 rubber coatings)

RN 3669-02-1 HCAPLUS

CN Distannoxane, 1,1,3,3-tetrabutyl-1,3-bis[(1-oxododecyl)oxy]- (CA  
 INDEX NAME)



IC C08G047-04A  
 CC 42 (Coatings, Inks, and Related Products)  
 ST polysiloxane coating curing; curing  
 polysiloxane coating; tin compd accelerator; room temp  
 vulcanizable elastomer  
 IT Rubber, silicone  
 (coatings of vinyl compds.-modified, room temperature-curable  
 )  
 IT Coating materials  
 (silicone rubber, vinyl compound-modified  
 room temperature-curable)  
 IT 3465-77-8 3869-02-1 10428-19-0 17973-82-9  
 22058-93-1 24801-34-1  
 RL: CAT (Catalyst use); USES (Uses)  
 (catalysts, for curing of silicone  
 rubber coatings)  
 IT 100-42-5, Styrene, uses and miscellaneous 107-13-1,  
 Acrylonitrile, uses and miscellaneous 141-32-2, Acrylic acid  
 butyl ester  
 RL: USES (Uses)  
 (polymers with silicone rubber and vinyl  
 compds., coatings of, room temperature-curable)

L39 ANSWER 36 OF 36 HCAPLUS COPYRIGHT 2010 ACS on STN  
 ACCESSION NUMBER: 1966:491506 HCAPLUS Full-text  
 DOCUMENT NUMBER: 65:91506  
 ORIGINAL REFERENCE NO.: 65:17154b-g  
 TITLE: Flame-retardant compositions for polymers  
 PATENT ASSIGNEE(S): Hooker Chemical Corp.  
 SOURCE: 20 pp.  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Unavailable  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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NL 6515354		19660526	NL 1965-15354	1965 1125

PRIORITY APPLN. INFO.: US  
 <--  
 1964  
 1125  
 <--

ED Entered STN: 22 Apr 2001  
 GI For diagram(s), see printed CA Issue.  
 AB The title compns. are prepared by mixing an inflammable polymer, a flame-retardant with  
 formula I (in which X is Cl, Br, or F; Y is Cl, Br, F, or a C1-6 alkyl or alkoxy group;  
 and Z is a C5-18 cyclic hydrocarbon group with 1-5 condensed rings), and 0.1-3 weight%  
 (based on flame retardant) of a color-stabilizing mixture containing ≥ 1 polyvalent  
 metal compds. The flame retardants are Diels-Alder adducts of halogenated  
 cyclopentadiene and have a m.p. >250°, a halogen content >40%, and a vapor pressure of  
 <0.1 mm. at 197°. They are prepared by reaction of 2 moles halocyclopentadiene with 1  
 mole of a polyalkene, e.g. 1,7-octadiene, 1,5-cyclooctadiene, or cyclopentadiene. The



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color stabilizers can be divided into 4 classes: (1) Mixts. of 60-40 weight% of a metal phenolate, e.g. Ba octyl- or nonylphenolate, 8-30 weight% of a phosphite, and 20-40 weight% of a polyvalent metal benzoate. (2) Mixts. of 5-60 weight% of a polyol with formula  $RCH_2C(CH_2OH)_3$ , in which R is a C1-30 alkyl or alkoxy group, e.g. dipentaerythritol, 5-60% of an alkyl-substituted phenol, e.g. a cresol, a phenylphenol, an octylphenol, or a naphthol, and 90-35 weight% of a salt of a polyvalent metal (e.g. Cd, Ba, or Zn) and a C6-18 monocarboxylic acid (e.g. benzoic, lauric, or stearic acid). (3) Organic Sn compds. with the formula  $Sn(R_1)_1(O_2CR_3CO_2R_1)_m(O_2CR_2)_n$ , in which R1 and R2 are optionally substituted C1-30 hydrocarbon groups, R3 is a C1-30 hydrocarbon group containing an ethylenic double bond in the  $\alpha$ -position to the carboxylic group, and R4 is a hydrocarbon or heterocyclic group derived from a monovalent alc. or glycol, l is 2 or 3, m is 1-2, and n is 0-1 ( $l + m + n = 4$ ), e.g. dibutyltin bis(dipropylene glycol maleate). (4)  $Ph_4Sn$ ,  $Sn(II)$  dicaprylate, and  $Ph_3SnOH$ . Further improvement of flame-retarding properties can be obtained by incorporation of  $Sb_2O_3$  or another Sb compound

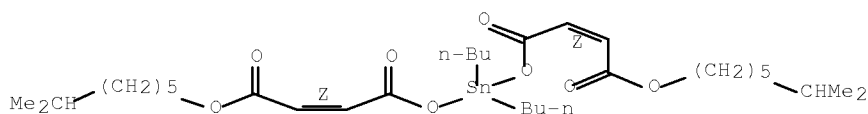
Thus, to mixts. of 60 parts polypropylene and 36.5 parts 1,4:7,10-dimethanocycloocta-1,2,3,4,7,8,9,10,13,13,14,14-dodecachloro-1,4a,5,6,6a,7,10,10a,11,12a-dodecahydro-1,2,2,5,6-dibenzene (prepared by condensation of 2 moles hexachlorocyclopentadiene and 1 mole 1,5-cyclooctadiene in xylene at  $<200^\circ$ ) varying amts. of color stabilizers were added. The mixts. were kept in test tubes at  $288^\circ$  for 15 min., and the colors estimated scale running from 1 (excellent) to 9 (color of the blank). The results were: (amts. of stabilizer per 100 parts mixture and color given): Bu2Sn bis(isooctyl maleate) (2,2 and 1,2), Bu2Sn maleate (1,3), dibutyltin diacetate (1,4), Bu2Sn dilaurate (2, 5, and 1, 6), mixture of Ba(OBz)2 26, Cd(OBz)2 64, PhOH 5, and a polyol 5% (1,8), blank (0, 9).

IT 99759-67-8, Tin, dibutylbis[(3-carboxyacryloyl)oxy]-, diisooctyl ester  
(olefin polymer and polyamide color-stabilized fire-resistant compns. with chlorinated condensed polycyclic compds., metal salts of organic acids and)

RN 99759-67-8 HCAPLUS

CN 5,7,12-Trioxa-6-stannanonadecanoic acid,  
6,6-dibutyl-18-methyl-4,8,11-trioxo-, 6-methylheptyl ester, (Z,Z)-  
(9CI) (CA INDEX NAME)

Double bond geometry as shown.



IC C07C

CC 48 (Plastics Technology)

IT Siloxanes  
(methyl, encapsulation and potting compns. from  $\alpha$ -olefins,  $\alpha,\omega$ -diolefins and, with Pt catalysts)

IT 76-87-9, Tin, hydroxytriphenyl- 77-58-7, Tin, dibutylbis(lauroyloxy)- 595-90-4, Tin, tetraphenyl- 1067-33-0, Tin, diacetoxydibutyl- 1912-83-0, Octanoic acid, tin(II) salt 30142-56-4, Tin, tributyl[(3-carboxyacryloyl)oxy]-, isooctyl ester 99759-67-8, Tin, dibutylbis[(3-carboxyacryloyl)oxy]-, diisooctyl ester  
(olefin polymer and polyamide color-stabilized fire-resistant compns. with chlorinated condensed polycyclic compds., metal salts of organic acids and)

# 10/584,396-323714-EIC SEARCH

## FULL SEARCH HISTORY

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(FILE 'HOME' ENTERED AT 15:09:16 ON 04 MAR 2010)

FILE 'HCAPLUS' ENTERED AT 15:09:21 ON 04 MAR 2010

E US20070282088/PN

L1 1 SEA SPE=ON ABB=ON PLU=ON US20070282088/PN  
D ALL  
SEL RN

FILE 'REGISTRY' ENTERED AT 15:10:00 ON 04 MAR 2010

L2 3 SEA SPE=ON ABB=ON PLU=ON (3669-02-1/BI OR 854279-95-  
1/BI OR 854279-96-2/BI)  
D SCA

L3 1 SEA SPE=ON ABB=ON PLU=ON L2 AND C40 H82 O5 SN2/MF

FILE 'STNGUIDE' ENTERED AT 15:14:33 ON 04 MAR 2010

FILE 'REGISTRY' ENTERED AT 15:19:34 ON 04 MAR 2010  
E C28H70O10SN/MF

FILE 'STNGUIDE' ENTERED AT 15:19:46 ON 04 MAR 2010

FILE 'REGISTRY' ENTERED AT 15:22:54 ON 04 MAR 2010  
E C22H43O10SN/MF

FILE 'LREGISTRY' ENTERED AT 15:24:23 ON 04 MAR 2010

L4 FILE 'LREGISTRY' ENTERED AT 15:24:50 ON 04 MAR 2010  
STR

FILE 'REGISTRY' ENTERED AT 15:49:12 ON 04 MAR 2010  
E C36H42O12SN/MF

L5 4 SEA SSS SAM L4  
D SCA

L6 73 SEA SSS FUL L4  
SAV TEMP L6 LOE396REG/A

L7 1 SEA SPE=ON ABB=ON PLU=ON L2 AND L6  
D SCA

L8 73 SEA SPE=ON ABB=ON PLU=ON L7 OR L6

L9 74 SEA SPE=ON ABB=ON PLU=ON L8 OR L3

FILE 'REGISTRY' ENTERED AT 15:54:27 ON 04 MAR 2010  
D QUE STAT L6

L10 FILE 'LREGISTRY' ENTERED AT 15:55:33 ON 04 MAR 2010  
STR L4

FILE 'REGISTRY' ENTERED AT 15:56:14 ON 04 MAR 2010

L11 2 SEA SUB=L6 SSS SAM L10  
D SCA

L12 26 SEA SUB=L6 SSS FUL L10

L13 1 SEA SPE=ON ABB=ON PLU=ON L2 AND L12  
D SCA

L14 27 SEA SPE=ON ABB=ON PLU=ON L3 OR L12  
SAV TEMP L14 LOE396REGA/A

L15 2 SEA SPE=ON ABB=ON PLU=ON L3 OR L13

FILE 'HCAPLUS' ENTERED AT 15:59:01 ON 04 MAR 2010

L16 76 SEA SPE=ON ABB=ON PLU=ON L15

L17 272 SEA SPE=ON ABB=ON PLU=ON L14

L18 272 SEA SPE=ON ABB=ON PLU=ON L16 OR L17  
D L1 PRAI

L19 1 SEA SPE=ON ABB=ON PLU=ON L1 AND L18

# 10/584,396-323714-EIC SEARCH

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D SCA
L20      QUE SPE=ON  ABB=ON  PLU=ON  PY=<2004 NOT P/DT
L21      QUE SPE=ON  ABB=ON  PLU=ON  (PY=<2004 OR PRY=<2004 OR
        AY=<2004 OR MY=<2004 OR REVIEW/DT) AND P/DT
L22      253 SEA SPE=ON  ABB=ON  PLU=ON  L18 AND ((L20 OR L21))
L23      82  SEA SPE=ON  ABB=ON  PLU=ON  L22(L) (CAT OR CATAL?)
L24      QUE SPE=ON  ABB=ON  PLU=ON  ?SILOXAN?
L25      35  SEA SPE=ON  ABB=ON  PLU=ON  L23 AND L24
L26      QUE SPE=ON  ABB=ON  PLU=ON  POLYMI? OR CURE# OR
        CURING# OR CURAB? OR CROSS(W)LINK? OR CROSSLINK?
L27      67  SEA SPE=ON  ABB=ON  PLU=ON  L22(L)L26
L28      QUE SPE=ON  ABB=ON  PLU=ON  SILICON?(3A) (RUBBER OR
        ELASTOMER)
L29      6  SEA SPE=ON  ABB=ON  PLU=ON  L23 AND L28
L30      53  SEA SPE=ON  ABB=ON  PLU=ON  L27 AND L23
L31      1  SEA SPE=ON  ABB=ON  PLU=ON  L1 AND L25
L32      32  SEA SPE=ON  ABB=ON  PLU=ON  L25 AND L30
L33      37  SEA SPE=ON  ABB=ON  PLU=ON  L25 OR L32 OR L29
L34      1  SEA SPE=ON  ABB=ON  PLU=ON  L33 AND L1
        D AU
        SAV TEMP L33 LOE396HCP/A
        D PRAI
        DEL SEL
        SEL L34 AU
L35      40  SEA SPE=ON  ABB=ON  PLU=ON  ("CHAUSSADE, MARC"/AU OR
        "GUENNOUNI, NATHALIE"/AU)
L36      QUE SPE=ON  ABB=ON  PLU=ON  CHAUSSADE M?/AU
L37      QUE SPE=ON  ABB=ON  PLU=ON  GUENNOUNI N?/AU
L38      1  SEA SPE=ON  ABB=ON  PLU=ON  L33 AND ((L35 OR L36 OR
        L37))
L39      36  SEA SPE=ON  ABB=ON  PLU=ON  L33 NOT L38

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FILE 'REGISTRY' ENTERED AT 16:13:05 ON 04 MAR 2010  
D L15 1-2

FILE 'HCAPLUS' ENTERED AT 16:14:37 ON 04 MAR 2010  
D QUE L33  
D L38 1 IBIB ED ABS HITSTR HITIND  
D L39 1-36 IBIB ED ABS HITSTR HITIND